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BEFORE THE WATER POLLUTION CONTROL
ADVISORY COUNCIL (WPCAC)

TRANSCRIPT OF PROCEEDINGS

Heard at Room 111, Metcalf Building
1520 East Sixth Avenue
Helena, Montana
August 19, 2011
10:00 a.m.

ACTING CHAIRMAN TREVOR SELCH; MEMBERS
EARL SALLEY, KATHLEEN WILLIAMS,
RICHARD HOEHNE, ROGER MUGGLI, KAREN BUCKLIN
SANCHEZ, MICHAEL WENDLAND; and
COREY FISHER (By telephone)

PREPARED BY: LAURIE CRUTCHER, RPR
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WHEREUPON, the following proceedings were
had:

* * * * *

CHAIRMAN SELCH: With Corey on the phone, that gives us our quorum. We're going to get started. We've got some people showing up late, and calling in late here, so I'll call the meeting to order here at 10:04.

Our first item would be the approval of the agenda from our meeting on April 14th. Sorry. Our current agenda actually. And we talked about moving a few things around, but I think the last thing we decided was to just kind of keep it as we go and modify it as we need to. Does anyone have any additions to the agenda? That would be a motion to approve the agenda.

MR. SALLEY: So moved.

MR. WENDLAND: Second.

CHAIRMAN SELCH: Second. Passed. Then our minutes from our April 14th meeting. I managed to just skim through them last night, and I didn't have any major changes or anything like that that I could see. Does anyone have any changes to the minutes from our April 14th?

MR. WENDLAND: Move we accept the

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1 minutes.

2 MS. BUCKLIN-SANCHEZ: I second.

3 CHAIRMAN SELCH: Hearing second. So I
4 move this on to our first action item, our one and
5 only action item for this meeting, which is the
6 DEQ4. And we have Barb and Steve that are going
7 to present that to us.

8 MR. KILBREATH: I'm not quite sure where
9 you want us to stand, so we'll just take over some
10 part.

11 I'm Steve Kilbreath, and I'm the program
12 manager for DEQ's Subdivision Section, and Public
13 Water Engineering Program. Barb Kingery is one of
14 the staff engineers in the Subdivision Program,
15 and Barb has been here six years.

16 MS. KINGERY: Something like that, yes.

17 MR. KILBREATH: And I have the dubious
18 distinction of being the Subdivision Section Head
19 for the longest period of time since Ed Casne. So
20 people who have my job last fourteen months, there
21 is usually an ambulance and a 911 call, and they
22 get a new supervisor.

23 MS. KINGERY: And we're so lucky to have
24 you.

25 MR. KILBREATH: And so what we thought

4
1 we'd do is I'd start with saying to you guys what
2 is DEQ4. And DEQ4 is the design standards for
3 onsite wastewater systems in the State of Montana.

4 DEQ4 came to being in the year 2000.
5 DHES and DEQ reorg'ed in 1995, and DEQ came into
6 being; and DHES had designed circulars that were
7 called the WQB's, and so the water quality
8 circulars, they were circulars for individual
9 septic systems, multi-user systems, experimental
10 systems, and bigger ones, so there was about three
11 or four, and you probably remember them, three or
12 four of those.

13 They kind of got morphed into DEQ2,
14 which is the big municipal standards, and DEQ4,
15 which is onsite standards.

16 Why are these important? These control
17 the design of all onsite wastewater systems in
18 Montana. Title 50, which is the powers and duties
19 of the local health officers, gives the county
20 sanitarians the ability to write septic permits
21 for sewage coming out of buildings, private
22 buildings. They pick up DEQ4 as their design
23 standards, so every county sanitarian in this
24 state uses DEQ4 in their day-to-day work.

25 The Subdivision Section uses DEQ4 to

5

1 have all onsite systems meet the same standards
2 during a subdivision review process, and the
3 Public Water Supply Section uses DEQ4 for design
4 standards for all public wastewater systems that
5 aren't municipal. So DEQ4 is the design standard
6 that everybody uses in the state of Montana.

7 MS. KINGERY: So that means everybody,
8 even in Helena, Montana and everybody in Sidney,
9 Montana, you know, or Plentywood, Montana, you
10 know, all the gamut. So we have these great big
11 municipalities that this might be a part of, and
12 we have these little tiny deals. So when we write
13 those standards as statement of standards, we have
14 to keep all those counties in mind because it's
15 quite a different world, where you land.

16 MR. KILBREATH: I get a call once in a
17 awhile from Walt McNutt in Sidney who says, "You
18 all have really big rules for really little
19 projects." And so, you know -- So Barb is right.
20 It's got to apply across the state.

21 In 1996, Mark Simonich, the Director at
22 DEQ, directed Bonnie Lovelace to form a task force
23 and develop a new circular. The task force was
24 formed, and between the period of 1996 to 2000,
25 they developed a subdivision task force and a

6
1 nondeg task force. Out of the subdivision task
2 force they revised subdivision rules. They came
3 up with the revisions to the WQB's to create DEQ4,
4 and they came up with current nondegradation rules
5 as it applies to subdivisions. So there was quite
6 a busy period in there.

7 And our present DEQ4 was adopted in
8 2004; it was changed and modified in 2000, it was
9 adopted; it was modified in 2002.

10 MS. KINGERY: And then in 2009, we added
11 a chapter, gray water, to it. So essentially
12 we're working off the 2004.

13 MR. KILBREATH: Two or four.

14 MS. KINGERY: Yes, with that one little
15 chapter added in, is what we're doing.

16 MR. KILBREATH: And so when we sat down
17 to do this, we felt it was important on a five
18 year, projected five year basis, to review
19 standards, get current, get with what everybody
20 else is doing.

21 We should have done this a few years
22 ago, but a few years ago, the entire world was
23 upside down in Montana. We had nine FTE in the
24 Subdivision Section. We had 10,000 lots a year
25 coming in the door. You couldn't find the door,

1 you couldn't find your desk because of the
2 submittals. We were too busy to work on the
3 standards. And it was during that time that you
4 saw the holes and flaws in the standards, when
5 you're just buried and everything is happening.

6 Since then the economy has gone the
7 other direction. We've laid off the vast majority
8 of subdivision employees. We have the other
9 problem now, in that we have 1,500 total lots in
10 the state, and we've got two people, two employees
11 left. So we've been on this roller coaster. And
12 we started working on DEQ4 when we were coming off
13 of the hill, and we think we've hit the bottom,
14 and we're about ready to -- it is a really good
15 time because it's slow. It's a good time to work
16 on the standards.

17 Barb and I sat down and said, "Now, how
18 do we do this?," because the way the process has
19 been in the past, has been through a task force,
20 and a task force is a really good idea because it
21 gets outside people and interested parties.

22 And the subdivision task force, the DEQ4
23 task force, started out with this many people
24 representing this much stuff; and as it ground on,
25 and on, and on, and on, and on, it ended up with

8
1 about five counties being at the table, and one
2 engineer, and one tank representative.

3 And so the standards got driven by the
4 big counties because they were the ones that
5 showed up. So things that worked in Missoula
6 really well are in our documents, and therefore
7 the calls from Walt McNutt. Therefore, you get
8 the small county stuff.

9 So we've tried to incorporate that. We
10 did a different approach this time. So I'll let
11 Barb talk about this approach.

12 MS. KINGERY: And some of the reasons we
13 did this approach also were we saw -- within the
14 document, we saw some conflicts between our rules
15 in different groups of DEQ, and some
16 inconsistencies, technical inconsistencies, that
17 were going on.

18 The other thing that we saw often were
19 -- We would get those calls from vendors who would
20 say, "I'd like you to please certify my product in
21 Montana. I want to be on the approved list," and
22 we say, "We don't have an approved list."

23 MR. KILBREATH: You go to Washington or
24 other states, you can open up their internet site,
25 and they'll have a list of things, a list of

1 additives that are approved, they've got a list of
2 effluent filters, and a list of poly tanks, you
3 know, etc., etc., because they have staff enough,
4 and they have people that are just reviewing those
5 technical standards, and they just write you an
6 approval to use your product.

7 MS. KINGERY: Right. So we had all this
8 sort of mulling around in our minds, and what we
9 decided to do was we would form together a small
10 select committee of people, and on that committee
11 we would have different people from DEQ who would
12 represent different bureaus within our department;
13 we would have consultants who would deal with
14 primarily different sort of vendors and that kind
15 of a thing; and then we thought we would include
16 county sanitarians because they also use these in
17 their Title 50 permits.

18 So we had a group of about a dozen
19 people, and they were hand selected ones, trying
20 to get representation from different parts of the
21 state, and different points of view, and we had
22 this group of 12. And what we did is we assigned
23 a chapter or a section to small committees within
24 that group of 12; and so on each chapter we had
25 one DEQ representative, one person from the

10
1 industry, and one county sanitarian. And the
2 three people worked together on each chapter, and
3 they developed, and changed, and modified as they
4 wanted as a small group.

5 We then came back to our group of 12,
6 and reviewed as our group of 12 everything that
7 that small group had put together, modified, and
8 changed, did that kind of stuff, and came out with
9 this master draft document.

10 At that point, then we thought, okay, so
11 now we've had a kind of a select group here; we've
12 received their comments; let's take this out to a
13 little bit of a -- let's expand just a little bit
14 more, because like I said, our first group was
15 very hand selected.

16 And so we started what we called
17 stakeholder meetings that we held throughout the
18 state, and we had three different ones -- one in
19 Polson, one in Helena, and one in Billings -- and
20 to that we invited anybody we could think of, and
21 we had terrific turnout for all of them. And we
22 had people from the realtors showing up, we had
23 vendors showing up, we had people who have --
24 other sanitarians that weren't included in the
25 list, we had the septic tank people showing up.

11
1 MR. KILBREATH: Barb had the septic tank
2 guys show up in Billings, and they were talking
3 about concrete ASTM standards. And if any of you
4 guys have ever looked at concrete ASTM standards,
5 that's like rocket science.

6 MS. KINGERY: Yes.

7 MR. KILBREATH: And they're bringing
8 this stuff to the table, you know.

9 MS. KINGERY: Right. So it was a real
10 positive thing, and great turnout. And so we sort
11 of collected those comments, and put them
12 together. And then we also, for those who
13 couldn't make those meetings at the three
14 different sites, we established a blog that we
15 did, and this allowed people to comment on our
16 blog, and could actually attend in person any of
17 the stakeholders meetings.

18 And we had some good comment and
19 discussion. About 40 comments showed up on the
20 blog. And so what we did then, so we have all
21 these comments from the stakeholders, we had the
22 comments on the blogs, and what we decided to do
23 then was, okay, so DEQ is in charge of this
24 document. DEQ needs to be the one that takes all
25 of these comments from all these different places,

12
1 pulls them in together, and puts them together in
2 something that's over here. So that's what we
3 have been working on as of late.

4 We sat down with people from the Water
5 Protection Bureau, Legal, SRF, and our subdivision
6 group, and we went through chapter by chapter, we
7 discussed the comments that we had received, and
8 came up with what you have in front of you.

9 So it's been kind of really a little bit
10 of a different process from the original DEQ4, but
11 one that I think worked very well. And hopefully
12 our goal was to make a consistent document that
13 would work for all points of view.

14 MR. KILBREATH: And we had such
15 interesting issues with it, you know. If you look
16 on the page that starts showing you the changes,
17 and you look at New Definitions, and you look at
18 the word "bedroom," well, heck, everybody knows
19 what a bedroom is. In our rules, a bedroom is any
20 room that can be used for sleeping.

21 Now, is your garage a bedroom? It is
22 here in Sidney, Montana. There is no room to
23 rent, and you've got parts in your garage that's
24 separating, then your garage is a bedroom, you
25 know. Is your kitchen a bedroom? Well, it could

1 be used for sleeping.

2 And this is such an interesting
3 question. There is actually a case in the Supreme
4 Court right now, Missoula County, defines bedrooms
5 under these rules; told the lady that she had to
6 up size her septic system because she added two
7 bedrooms to it. Her house is in the flood plain.
8 Incidentally here in the flood plain, you can't
9 increase your septic system. They had to tear
10 these two buildings down that DEQ built.

11 They went to District Court in Missoula
12 County. District Court said Missoula County
13 unconstitutionally defined the definition of the
14 word "bedroom" in this particular case, and the
15 lady can keep her buildings. And Missoula County
16 appealed to the Supreme Court. So the Supreme
17 Court has currently got an appeal from District
18 Court on the word "bedroom."

19 Onsite septic systems are sized on the
20 number of bedrooms providing people, providing
21 flushes, and shower, and laundry; and so you'd
22 think the word "bedroom" would be a simple word.
23 There might be a more interesting definition when
24 the Supreme Court gets done, but it's the little
25 words like that in this that have really

14
1 interesting context, you know, when you get down
2 to some of the fine points.

3 MS. KINGERY: Right.

4 MR. KILBREATH: You are being puzzled by
5 that one, aren't you?

6 MS. BUCKLIN-SANCHEZ: I was just
7 thinking. Why not design septic tanks like you
8 design public water systems, based on the number
9 of people in the household, rather than --
10 (inaudible) --

11 MR. KILBREATH: We've gone to that,
12 Karen -- we've gone to that -- when you get a
13 certain number of folks. So we're saying at ten
14 homes or more, you design on 100 gallons per
15 capita, two and a half people per house, because
16 at ten homes, that all averages out. But what you
17 don't want to do is two and a half people per
18 house on a per capita, on an individual septic
19 system, because then you'd end up with something
20 that doesn't have any margin for error.

21 MS. BUCKLIN-SANCHEZ: Because these are
22 individual onsites.

23 MR. KILBREATH: Because these are
24 individual onsites, and the limit factor with
25 those is the soil treatment, you know. You can

15
1 have a tank, you know, a septic tank, and one way
2 or the other, a little over, a little under, the
3 tank will function, but your drainfield and the
4 hydraulic capacity of your drainfield will control
5 what happens on that lot.

6 And if you miss it by 100 gallons --
7 which isn't anything to miss on a municipal system
8 -- but on an onsite system, if you miss by 100
9 gallons, you're done.

10 So we went long and hard, back and
11 forth, because we knew that at some point we were
12 way over-sizing community systems by doing three
13 and four bedrooms, and we see that in flow
14 numbers, you know. You look at a subdivision in
15 the Helena valley that has 140 homes, and it has
16 got 150, 180 gallons a day average going through a
17 flow meter, and bedroom sizes. So per capita
18 works at the number, and we chose one, and time
19 will tell if we're right or wrong.

20 MS. KINGERY: And those are exactly sort
21 of the issues that we were receiving comments on
22 from the public, and from designers saying, "You
23 know, this old DEQ4 is so rigid. How can we make
24 this work for all these kinds of systems?" And so
25 we would have a two hour discussion on sizing,

1 that kind of thing.

2 MR. KILBREATH: If you make your tanks
3 too big, you have seasonal residences that have
4 advanced treatment, you've got a big tank that
5 loses its heat, your advanced treatment doesn't
6 work, the bugs don't live. So then small septic
7 tanks.

8 So we've done sort of the gamut on the
9 issues, and the issues, they get real technical.
10 Everybody thinks an onsite septic system, anybody
11 can do this, but you can't. They get real
12 complicated.

13 The other issues we run into with onsite
14 septic systems that get real complicated real
15 quick are those same things that mess up municipal
16 plans. How about RV's? How about recreational
17 vehicles? You park your RV, you put your magic
18 little chemical in your black water holding tank,
19 and your magical blue chemical is a mixture of
20 formaldehydes and things that stop the biological
21 activity so your holding tank doesn't stink, and
22 you fill that up, and you dump that in your septic
23 tank that you've got to dump at home.

24 What happens to your septic tank? It
25 suddenly becomes very upset. It's a natural,

17
1 living, biological thing, and if you dump the
2 wrong things in it, you mess it up.

3 So what happens when you have a
4 restaurant that has high grease, high organic
5 material? High strength waste is something that
6 was alluded to in DEQ4. We put a high strength
7 waste chapter in. We're probably a long ways from
8 the right answers on high strength waste, but at
9 least we've got a starting point, you know.

10 High strength waste example. Steak
11 house up out of Great Falls. Brand new steak
12 house. Professional engineer designed onsite
13 wastewater system. Four and a half months later,
14 onsite wastewater system failed, flowing over into
15 the road side ditch. They double the size of the
16 onsite wastewater system, and eleven months later,
17 they were both failed and flowing over into the
18 onsite ditch. The reason for failure? Plugging
19 with grease, and high organic loading.

20 So we have the same issues the big
21 plants do. Maybe a little bit more dramatic in
22 the small spots, you know, the small systems.

23 MS. KINGERY: One of the other issues
24 and points of confusion with the old DEQ4 had to
25 do with our sizing of drainfields and the

18

1 reductions that were in place there. And in our
2 world, we deal with both onsite systems, and we
3 also deal with the Water Quality Act, and with
4 nondeg. And we do have a list of vendors that are
5 approved for Level 2 systems. And what happened
6 with that was if you were given a Level 2
7 certification, you were automatically given a
8 reduction in your drainfield size.

9 Well, people didn't understand that
10 there is two different sections. We have the
11 nondeg section, and we have the DEQ4 standards
12 section. And we tried real carefully in this
13 draft we have in front of you to make the
14 distinction between what you do for nondeg is for
15 nondeg, and what you do for sizing your drainfield
16 has to do with different components and different
17 elements.

18 Nondeg would deal with nitrogen and
19 phosphorus, and DEQ4 on your onsite system would
20 deal with BOD, which is essentially the amount of
21 organics in your waste stream, and TSS, total
22 dissolved solids. So we deal with two different
23 sets of criteria, and we were trying to be real
24 careful with dividing those apart, and letting
25 people know that just because you have one doesn't

1 mean you get another, making sure that they're¹⁹
2 understanding that. And so as coming out of that,
3 we've sort of stepped into another world. Sort of
4 brought us into something else.

5 MR. KILBREATH: Another hole in the
6 road.

7 MS. KINGERY: Yes. There are many
8 products out there -- not many -- but some that
9 are beginning to present themselves that have NSF
10 Standard 40 recertification. And what that means
11 is they have gone through the NSR testing process
12 to show that they can treat to a certain level of
13 BOD and TSS.

14 And we have included in this draft in
15 front of you provisions that they have made
16 standard wording, that if they have a Standard 4
17 on their system, that for that reason, we give
18 them a reduction in the drainfield size, not
19 because they made a Level 2 list or anything like
20 that.

21 MR. KILBREATH: You can go to our
22 website, and there is a list of Level 2 systems,
23 and Level 2 apply to nondegradation only; and the
24 Level 2 systems all started off with a 50 percent
25 reduction when they were designated, because

1 things like intermittent sand filters and
2 recirculating sand filters were on those lists,
3 those Level 2 lists, and they happen to do a
4 really good job of BOD and TSS reduction.

5 And as we started getting new systems
6 added to that, they were granted 50 percent
7 reductions, and nobody looked at why. We did a
8 data audit on our Level 2 systems two years ago,
9 and lo and behold, we found that they were all
10 doing really well on their nitrogen reduction, but
11 BOD and TSS varied.

12 You know, we had one vendor that was
13 getting about 10/10 on BOD and TSS; we had another
14 vendor that was getting about 60 on BOD and about
15 20 on TSS; we had another vendor that was getting
16 30/30 you know; but they were all meeting their --
17 (inaudible) -- standards, until we were struggling
18 with how do we deal with those existing guys that
19 have this pile of systems out and in the ground
20 with a 50 percent reduction, were talking to the
21 counties trying to find out, "Do we have any of
22 those with problems?"

23 And our gut feeling right now is the
24 three major Level 2 providers in the state, two
25 are the same company, just a different location.

1 Advantex (phonetic) is in Bozeman, and they have a
2 configuration for their system that involves a
3 recirc tank; and Advantex in Kalispell, they have
4 a configuration that involves a recirc through the
5 septic tank; and another company, I think they're
6 in Three Forks.

7 And the two Advantex, one of them gets
8 10/10 because it goes through a recirc tank. The
9 one that goes through the septic tank is 30/30.
10 The one that goes through the septic tank gets
11 better nitrogen reduction.

12 One of our big issues with this NSF 40
13 reduction thing will be how do we treat those
14 existing guys with fairness, with fairness and
15 without attorneys.

16 MS. KINGERY: Another big issue -- and
17 this was more of a comment from the public that we
18 received -- was that the old WQB's way back in the
19 early 1990s had pictures which made things much
20 easier to understand, and so they asked if we
21 could please bring the drawings back to the
22 circular.

23 And you'll notice that there are quite a
24 few drawings, and design examples, and different
25 kinds of things like that, which we try to bring

1 back in to make a little -- you know, I'm a real
2 visual person, and I do a lot better with pictures
3 than I do with words, so to just try and make it a
4 little more user friendly.

5 And another comment we received was
6 format. This is a new format for it. We kind of
7 divided things into chapters, tried to group like
8 systems together. We also added, as part of the
9 format change, sections of another circular in
10 DEQ2, which was a comment also from the public
11 that, "We're so confused. Sometimes I get the
12 note to go to DEQ4, sometimes I have to go to DEQ2
13 on larger systems. What do I do with that?"

14 And so we took the relevant sections out
15 of DEQ2, which is a design circular that deals
16 primarily with larger public municipal -- public
17 systems, and brought those into this document.

18 MR. KILBREATH: If you had a community
19 wastewater treatment system that was a DEQ4 style
20 system, like a recirc system, recirc filter to
21 drainfield, but you happen to put solids transport
22 and a lift station in to go into a central septic
23 tank, this septic tank, and this recirc filter,
24 and drainfield were covered under DEQ4, this solid
25 collection systems and pumping system were covered

23
1 under DEQ2, and it really made a mess when you
2 were trying to sort out standards, and design, and
3 "who's on first" kind of stuff, you know.

4 MS. KINGERY: So hopefully now if you
5 are treating your wastewater subsurface -- which
6 is what the DEQ4 is -- this will be where you go.
7 This will be the document, no matter if it's a mom
8 and pop, or a large system that goes to the large
9 community drainfield. And we deal with all sizes,
10 so we've got --

11 MR. KILBREATH: And we brought file
12 examples. This is a mom and pop subdivision file
13 from Broadwater County, where the homeowner
14 designed, did their subdivision, and they followed
15 DEQ4 for their soils work in their submittal. And
16 you notice they've got a nice hand drawn lot
17 layout, you know. And so that's a program. A
18 program decision is our decision --

19 Our program, we have different levels of
20 files that require an engineer or don't require an
21 engineer. Small projects attempt to -- Some
22 people attempt to do them themselves. So we have
23 to have a document that works across the board;
24 whereas we have a file like this that will be a
25 recirc filter for 32 homes designed by a

1 professional engineer, and you can see the
2 complication you get into, the details of
3 drawings. All of this is spelled out in DEQ4.
4 DEQ4 applies to this, and it applies to mom and
5 dad doing their own system, you know.

6 So we run the gamut of size of projects,
7 and we run the gamut of -- I hate to use the word
8 because I got in trouble the last time I used the
9 word -- competency of people submitting.

10 MS. KINGERY: Experience maybe.

11 MS. BUCKLIN-SANCHEZ: I doubt that.

12 MR. KILBREATH: I used that word in
13 front of the Board of Professional Engineers, and
14 they didn't like it.

15 MS. KINGERY: So another thing. So as
16 time develops, of course, new technologies come on
17 line, and everybody has a new magic box to do
18 things with. So this DEQ4 also tried to
19 incorporate some new technologies that we're
20 seeing out there. We're including provisions for
21 subsurface drip systems, which is a different
22 configuration you can use for treatment. We're
23 including provisions for poly tanks, poly septic
24 tanks.

25 Some of this was sort of touched on

25
1 before in the old DEQ4, but just so briefly that
2 it really had -- it was ineffectual for it. So we
3 did that. And then also for composting toilets
4 and incinerating toilets that we call our waste
5 segregation systems, we've also included
6 technologies for that.

7 MR. KILBREATH: As a result of gray
8 water legislation in the last two legislative
9 sessions.

10 MS. KINGERY: Right. We saw that if
11 gray water was going to be used often, it would be
12 used with composting toilets. That's just the way
13 that the Legislature structured.

14 So that's kind of, just in a real brief
15 nutshell, kind of what we tried to look at, and
16 where we tried to go with this document.

17 Now, we have many steps ahead of us
18 here.

19 MR. KILBREATH: Lots of steps.

20 MS. KINGERY: Yes. This has been such a
21 great learning process. We're hoping eventually
22 to go to the Board of Environmental Review. I
23 imagine, because this is quite a change -- and
24 like Steve said, it's been since 2002 essentially
25 since we've done this -- that we will want a

1 longer comment period for that formal process.

2 And we also have our blog still going,
3 although we need to send out a new announcement
4 saying, "Hey, you guys," you know. The blog had
5 kind of received all the comments on that very
6 first initial document. They haven't --

7 (inaudible) -- the difference being this is what
8 came out of the DEQ assembly of all the comments
9 from the blog and from the stakeholders. So as
10 soon as we can get that notice out there, we're
11 going to -- (inaudible) --

12 MR. KILBREATH: The other one that we
13 passed around, this is a lot by lot. This is a
14 Fort Peck cabin site transfer, and this is the
15 detail that's going into each lot. Each lot
16 that's being transferred by Army Corps is putting
17 this kind of detail into each lot, so each owner
18 of the lot has a septic system, a place to replace
19 their septic system, and meets all current
20 standards. So just an example of -- this is all
21 the detail that comes out of DEQ4. So --

22 MR. HOEHNE: Do a lot of these smaller
23 communities have a combination of surface
24 treatment and surface lagoons and stuff, or this
25 is mainly just personal or small business type.

1 MR. KILBREATH: This is mainly small.
2 We'll see new subdivisions come in that are
3 covered under DEQ4. We have an application right
4 now for a 108 lot subdivision in the Helena valley
5 that has septic tanks, gravity septic tank
6 collection -- no, that's not a septic tank. It's
7 got a DEQ2 system, it's got an SBR, so it's got a
8 municipal type wastewater treatment system for the
9 subdivision; and then a soil area to get rid of
10 the effluent.

11 So mainly you start getting 100, or 200,
12 or 300 folks on a subdivision, you tend to get in
13 a technology that's not in DEQ4. You tend to go
14 to a higher mechanical treatment type system. I'm
15 trying to think of the biggest one. Jenny, can
16 you think of the biggest things we saw that would
17 have a discharge permit that would be DEQ4
18 systems?

19 They would have been -- you know, that
20 thing at Yellowstone Mountain Club, it had
21 Advantex systems, but the Advantex systems went to
22 a lagoon, and the lagoon went to spray irrigation
23 for a golf course.

24 What happens when you get bigger systems
25 is you tend to find something else for the

1 effluent. You tend to find a reuse for it, spray
2 irrigation; or if you're going to put it in the
3 ground, you need to do a higher treatment, and put
4 it in a rapid infiltration mechanism just to get
5 rid of it, because drainfields get to be really
6 big. So you tend to -- these systems, 100 lots,
7 sometimes maybe as high as 200, but that's really
8 pushing it. But lots of times, they're all
9 covered one individual and up to 20 or 30, you
10 know.

11 MS. KINGERY: I read some statistics
12 somewhere that said that maybe 40 percent of the
13 systems in Montana were onsite systems, or 40
14 percent of the households were onsite systems.

15 MR. KILBREATH: Yes, individual wells
16 and -- (inaudible) --

17 MS. KINGERY: If you're not within the
18 city of Bozeman, you're probably not on a septic
19 system.

20 MS. BUCKLIN-SANCHEZ: I'd like to say I
21 think it's critical to upgrade these standards,
22 but I'm curious also what you would say is the
23 most problematic area in the current design
24 standards. I see for example that you've deleted
25 at grade.

1 MR. KILBREATH: Nobody uses at grade.
2 People use elevated sand mounds or shallow
3 drainfields. We haven't seen an at grade come
4 through in years, so we said, "Why have it in
5 there?"

6 MS. KINGERY: And the old at grade
7 system was kind of interesting, in that I'm not
8 quite sure what went on with how they did that
9 particular standard for that one, but it required
10 that you have a drainfield that's one and a half
11 times normal size.

12 MS. BUCKLIN-SANCHEZ: It said 1.5. I
13 just saw that in there.

14 MS. KINGERY: Yes. And so why would
15 somebody do an at grade that's going to be one and
16 a half times bigger than an elevated sand mound or
17 a shallow cap one. It didn't make sense, so we
18 just didn't see it.

19 MS. BUCKLIN-SANCHEZ: You see a lot of
20 mounds.

21 MS. KINGERY: You do see a lot of
22 mounds.

23 UNKNOWN WOMAN SPEAKER: So what's the
24 most problematic -- (inaudible) -- currently that
25 causes --

1 MR. KILBREATH: I would bet right now
2 the fact that there is nothing in current DEQ4 --
3 or there is. It says, there is a clause in the
4 front of DEQ4 that says in order to discharge to a
5 DEQ4 system, you must have residential strength
6 waste. And so what does that mean? You know.

7 I've got letters from professional
8 engineers that says, "My pizza parlor, sandwich
9 shop, and coffee shop will have waste no different
10 than a three bedroom house," and it was like,
11 "Yeah. No way." You know? High strength. High
12 strength is a real issue with us. High strength
13 waste causes drainfields to just prematurely die.
14 I mean they just -- you know.

15 A properly sized, properly maintained
16 septic tank and drainfield system that has the
17 reasonable strength waste should have a life span
18 of 15 to 30 years, you know.

19 MS. KINGERY: So as part of that, so
20 just another sort of problem that we would see, so
21 we have to have residential strength waste, and
22 that's in one section of DEQ4; and then if we step
23 to another section, it gives us loads, what kind
24 of loads we can expect from a restaurant, from an
25 RV, from a -- you know, this area, you know. I

1 mean just all these things that would contribute
2 high strength waste.

3 So we have one section that tells us
4 what we can expect for our flows, and our other
5 section that says, "You can't put that in here."
6 So you know, working through different kinds of
7 projects, you just find things like that, and
8 calls on the telephone, "Well, if you tell me how
9 to design it, how to size it, why does it mean I
10 can't put it in here?" (Inaudible) So we needed
11 to sort of address those early.

12 MR. KILBREATH: In the body of the
13 document, on Page 28 and 29, these tables that say
14 "float," these tables are 300, 400 years old.
15 When did you first start seeing them, Karen?
16 These things are old, you know.

17 MS. KINGERY: But they are from EPA, and
18 you know, and they are still, you know, sort of
19 have the EPA stamp of approval, so --

20 MS. BUCKLIN-SANCHEZ: They're used for
21 design of public -- (inaudible) --

22 MS. KINGERY: Yes, they are.

23 MR. KILBREATH: So we find ourselves,
24 much to the dismay of the consultant, we find that
25 us sending them to like the local city water

1 departments. If they're doing a
2 bar/restaurant/gas station outside of Helena,
3 we'll send them to the City of Helena to get the
4 water meter records for Monroe's High Country
5 Travel Stop over here, and say, "You're proposing
6 something like this. Go find out what these guys
7 are doing to get gallons per day."

8 MS. KINGERY: I just had a call
9 yesterday from somebody that said, "I need some
10 help. I need to put in a grease trap. What do I
11 do about grease traps?" And we do mention it in
12 DEQ4 that you should have a grease trap if you're
13 on something like a kitchen, a public kitchen; but
14 no information on how to size it, what they look
15 like, any of that.

16 So in that particular case, what I did
17 is I said, "Okay. I have a draft, you guys. It
18 says, 'draft' across the section of the DEQ4. I'm
19 sending it to you. Look at it, know it's a draft.
20 It will help you size what you're putting in."

21 MR. KILBREATH: We try to get the things
22 that we commonly see and put them in here. We
23 even put in a drawing.

24 MS. BUCKLIN-SANCHEZ: What comments have
25 you gotten from sanitarians? One comment I would

1 expect would be "thank you," because this helps
2 us.

3 MR. KILBREATH: You know what they'll
4 do, Karen, is they'll take and they'll put this
5 page in the xerox machine and hand it to them with
6 a permit and say, "Do this."

7 MR. HOEHNE: So essentially this would
8 -- any new construction or any failing system that
9 gets replaced would have these requirements, but
10 anything else would be grandfathered in at this
11 point.

12 MS. KINGERY: Right.

13 MR. KILBREATH: Once this becomes
14 effective, it would be easy to start from this
15 point forward.

16 MS. WILLIAMS: Question, please. I have
17 a couple questions. It seems like the high end
18 residential strength is a pretty important term in
19 here. You guys you know your document better than
20 I do. But should they be in the definition
21 section?

22 MS. KINGERY: Residential strength I
23 believe is --

24 MR. KILBREATH: It's in there.

25 MS. KINGERY: You know, I speak, and

1 then I need to make sure.

2 MS. BUCKLIN-SANCHEZ: Page 12 has high
3 strength waste definition.

4 MS. WILLIAMS: Oh, I missed it. Sorry.
5 Thank you. Okay. And then I didn't know if it
6 would belong in this or not, but the restriction
7 on the mixing zone not extending beyond the
8 property line.

9 MR. KILBREATH: Not a design criteria.
10 We have a rulemaking process that's open right now
11 that is going to -- the Department rules to pick
12 up that House Bill 28 requirement, and we'll do
13 that in the subdivision rules.

14 MS. WILLIAMS: Okay. And a curiosity
15 question on my part is: Are people putting in
16 composting toilets? And I've never heard of a --
17 what was it called -- a flammable.

18 MS. KINGERY: Incinerator.

19 MR. KILBREATH: Seasonal cabins, you
20 know, cabin type places. I should be careful. I
21 won't say if you live in Missoula, anywhere
22 Birkenstocks, you might like composting toilets.
23 We have a demo facility in Missoula that's going
24 to try to get a composting toilet and a gray water
25 system. I'm not -- Ever since I listened to the

1 guy do the presentation on composting toilets, and
2 he talked about fruit flies, I kind of turned off.

3 MS. WILLIAMS: So we don't really have
4 any better functioning --

5 MR. KILBREATH: We have some in a
6 recreational setting.

7 MS. KINGERY: Just if I have to look
8 into my crystal ball, I would see that as more of
9 Montana gets developed, and so here we are
10 stepping into trying to keep our different parts,
11 and gray water comes into -- as a mechanism for
12 helping people pass their nondeg issues, I think
13 composting and incinerating are going to become
14 another tool that they can pull out of their belt
15 to help them with their nondeg issue.

16 MS. WILLIAMS: I just remember 16 years
17 ago when I was working at the Legislature, that
18 someone came in wanting to put in a composting
19 toilet, and we couldn't find anything that would
20 allow them to do that. So I'm glad --

21 MR. KILBREATH: We would allow it. And
22 there is a composting manufacturer in Whitefish,
23 and he does systems, and there is trail heads and
24 park areas that have some.

25 MS. WILLIAMS: It also seems that with

1 the increasing demand for treated potable water,
2 that it makes sense that we find another way to
3 use fresh water than for waste.

4 MR. KILBREATH: And the point Barb
5 brings up is when we look at background
6 nondegradation for a lot, if you're between seven
7 and a half milligrams and ten milligrams in your
8 background nitrate, you're in trouble with an
9 onsite system. If you're above ten and below 24,
10 you're in trouble with an onsite system.

11 Gray water has ten milligrams nitrogen.
12 Gray water with a composting toilet might fill one
13 of those nondeg measures, you know. You've got
14 some places where it might work.

15 MS. WILLIAMS: Then a last question.
16 The first four months of this year, I was in an
17 interesting environment across the street.

18 MR. KILBREATH: You had a new learning
19 experience.

20 MS. WILLIAMS: And I keep hearing this
21 mantra that Montana is not business friendly, that
22 there is excessive red tape, that our
23 environmental regulations are barriers. So I
24 guess my -- and I'm just putting that out there
25 because that's what you hear. And so I guess I'd

1 like you to comment on whether you think that by
2 adding quite a bit of volume to these regulations,
3 whether you think you're actually making it easier
4 for the regulated community.

5 MR. KILBREATH: We just clarify what
6 needs to be done to be correct. So my opinion is
7 with clarification it becomes easier. Volume
8 doesn't necessarily mean more difficulty.

9 MS. WILLIAMS: That's what I would
10 think, but I wanted to hear your perspective.

11 MS. KINGERY: I think by having a
12 document, a one stop document, rather than like we
13 have over here, where it talks about different
14 vendors always are calling us to be on the list,
15 on a special list. Well, there is no way
16 staffing-wise we could possibly keep a list of
17 vendors. By having a clear document that's all
18 encompassing to see that you meet these criteria,
19 you're welcome to come to Montana.

20 MR. KILBREATH: So I get a phone call
21 from a poly septic tank manufacturer saying, "I
22 want to sell my tank in Montana. What do I have
23 to do to do that?" I said, "You have to read the
24 septic tank chapter in DEQ4." He said, "I did,
25 and that says it has to have a six foot burial

1 depth. My tanks aren't rated for six feet." ³⁸ I
2 say, "You can't sell your tank in Montana."

3 "Is there any mechanisms we can go to
4 get there?" And we said, "Yes, you may apply for
5 a blanket deviation against our design standards,
6 and if that blanket deviation is approved based on
7 your installation instructions, you could then go
8 down that path and market your tank, but you have
9 to market your tank very specifically within your
10 installation requirements."

11 So those get kind of cumbersome. It
12 would be nice to be able to keep, quote unquote,
13 "the list," but to add to the list and subtract
14 from the list would take people that we don't
15 have.

16 MS. WILLIAMS: Do you happen to know how
17 this approach or the former approach compares to
18 Wyoming or North Dakota?

19 MS. KINGERY: Wyoming, it's kind of
20 interesting you mention that, because they are
21 rewriting their onsite standards also, concurrent,
22 at the same time we are, and so we have been
23 communicating back and forth quite a bit with
24 Wyoming. And I don't want to call it a
25 collaborative effort, but we certainly do --

1 "Okay. There is what we've done. What do you
2 guys think?"

3 MR. KILBREATH: There would be a lot of
4 similarity in those two documents.

5 MS. KINGERY: You'll see, once theirs
6 comes out and ours comes out, I think you'll see
7 very similar. I don't know about North Dakota.

8 MR. KILBREATH: North Dakota has
9 standards for large systems only. I think they
10 probably only have a state engineer that reviews
11 systems when they get to 5,000 gallons or greater.
12 North Dakota is set up in five or seven health
13 districts, and in those health districts, all of
14 the onsite wastewater is regulated by a
15 sanitarian. The last time I talked to Rick
16 Bechtel (phonetic) from North Dakota, there was
17 only three sanitarians in the health districts,
18 and so their individual onsite wastewater stuff in
19 North Dakota is really loose on a good day.

20 MS. WILLIAMS: Are they seeing problems?
21 Excuse me for bringing up another state, but it's
22 hard to defend what we're doing, which I try and
23 do.

24 MR. KILBREATH: I listened to Dick talk
25 about onsite septic systems in North Dakota at a

1 big national conference about four years ago, and
2 he defined a North Dakota definition of advanced
3 treatment as a septic tank to keep your toilet
4 paper out of the road side ditch. So they're kind
5 of like -- their county by county stuff is miles
6 and miles and miles behind where we are.

7 When you look at us in reference to
8 other states, I think we're pretty forward
9 thinking. We've got a good set of regs. You have
10 states across the United States that the
11 separation of ground water ranges from zero inches
12 to seasonal ground water separation with septic
13 tank to four feet, and we're at four feet.

14 And we were recently asked by a
15 manufacturer of the septic product if we would
16 consider changing our ground water separation to
17 two feet because you can provide adequate
18 separation, adequate treatment with two feet of
19 soil. I said, "I truly believe that you can do
20 that, but my dead body will be in the way, and
21 you'll step over it before we do a four feet --
22 (inaudible) -- tank." That's not something we're
23 going to undertake at our level as a proposed
24 change. That should come from some other place.

25 That experience you have every four

1 months now, every other year, would be where that
2 would have to start.

3 MS. WILLIAMS: Well --

4 MR. KILBREATH: And it might.

5 MR. HOEHNE: Steve, on Level 2 systems,
6 there is a certain mount of yearly testing that
7 has to be done on it. Is that information
8 required somewhere that says you have to give that
9 to someone?

10 MR. KILBREATH: That's in the Level 2
11 rule, and 17.30.718, and the maintenance providers
12 of that data are required to keep that data and
13 present it to us when we request it. And we did a
14 major data request about a year and a half, two
15 years ago, and looked at all that data. Almost
16 all of our Level 2 providers were doing a really
17 good job on the nitrogen.

18 And the data looks so good that we're
19 contemplating opening those Level 2 rules and
20 changing those monitoring requirements, and
21 decreasing the requirements. If Level 2 is at 60
22 percent reduction of nitrogen, why don't we just
23 look at nitrogen, and not look at all the other
24 things, because there is about \$250 or \$300 worth
25 of analytical costs a year to the homeowners. We

1 could cut that to 40 and get the same result.⁴²
2 We're thinking about that.

3 MS. KINGERY: When we first started down
4 this path, it was kind of interesting to try and,
5 like I said, sort of divvy up what belongs in the
6 DEQ4, what belongs in the rule, and then of course
7 statutes is sort of the umbrella over all of it.

8 And so there was a lot of things in DEQ4
9 that was also in the rule, and so we tried to just
10 make this strictly a design document, let the
11 rules take care of the monitoring, and the mixing
12 zones, and all that kind of business, and leave
13 that in the rule, and let this just strictly be
14 "How am I going to design this system?"

15 MR. KILBREATH: So for instance, that
16 subdivision I passed around that had the 32 lots,
17 and the recirc filter, you take that subdivision
18 file that was submitted to the subdivision
19 program, that had been reviewed under 1736 for the
20 subdivision component, the wastewater system is
21 public. It will be reviewed under 1730(a), and it
22 will be reviewed in Jenny's shop because it has a
23 ground water discharge permit by one of her
24 engineers, and it would be reviewed under
25 17.30.1000 for ground water discharge permit.

1 So one file that comes in can have this
2 piece go here, and this piece go here, and you
3 know. So that's why we think this document needs
4 to describe how you do the wastewater treatment
5 system, and it tries to leave those other rules
6 alone, because sometimes those have --

7 MS. KINGERY: That is where we've got
8 troubles in the old document. It did sort of
9 bring those rules in. And when the rules change,
10 it made it problematic, because the rules changed,
11 but the DEQ4 did not change.

12 MR. KILBREATH: We live in a world
13 that's got lots of different rules out there,
14 depending on what you're proposing.

15 So I don't know what your pleasure is,
16 if you guys want to take this home, and read it,
17 and digest it, if you want to say, "Go forth." I
18 don't know what your feel is, because it's a big
19 document, and there is a lot of stuff, you know.

20 MS. KINGERY: Like I said, we've tried
21 to incorporate many different groups and many
22 different points of view. (Inaudible)

23 MR. KILBREATH: There's going to be an
24 awful lot of comments yet to come.

25 MS. KINGERY: I think those are --

1 MS. WILLIAMS: So your next steps are
2 what?

3 MR. KILBREATH: The next step is if you
4 give us a blessing to go forward, we'll go to the
5 BER, and they'll set a formal rulemaking process
6 with a public hearing, and we will ask the BER for
7 a longer comment period because it is a lot.
8 We'll activate our blog, and notify people that
9 it's up.

10 I think we were the first people to use
11 a blog for a rule in the agency, and it worked
12 really well.

13 MS. KINGERY: It worked great. I think
14 it touches on, like I said, people who are out
15 there. We don't want to travel all -- (inaudible)
16 --

17 MS. WILLIAMS: So how long of a review
18 period would you request?

19 MR. KILBREATH: I think we'd probably
20 try to get -- What do they get normally, Jenny?
21 Twenty days?

22 MS. CHAMBERS: It's normally thirty
23 days.

24 MR. KILBREATH: So we might go for 60,
25 because it's a lot of comments, a lot of

1 information.

2 MS. CHAMBERS: You guys are going to
3 have to watch your six month period from
4 initiation to adoption based upon a longer comment
5 period and how much you're going to get. So you
6 know.

7 MR. KILBREATH: I think we'll get a pile
8 of comments.

9 MS. KINGERY: I think we will, too, but
10 like I said, we have tried to, those who have
11 raised their voices already, we've tried to
12 address all of their comments. Some of them we
13 didn't take obviously, and those would be the ones
14 we probably need to address, that we've at least
15 internally gone through those, and made our
16 choices in a way that we think we can defend.
17 It's been very thoughtful process, I guess, is
18 what I want to say.

19 CHAIRMAN SELCH: What are the thoughts
20 of Council members? Are you guys wanting some
21 more time to review this, and look at this? I
22 personally haven't had a chance to read it, read
23 through it obviously. I glanced at it. From my
24 aspect, I know that we get a lot of requests to
25 review documents for drainfields and stuff like

1 that. And I'm glad I'll have a document we can
2 review, as opposed to just shrugging our
3 shoulders, and looking at all the numbers, and
4 have something to review first, but --

5 MS. WILLIAMS: If you need more time,
6 that's understandable. It sounds like we could
7 also participate while they're doing the extended
8 public review; and if they're going to run up
9 against a six month deadline, I would be -- I
10 would suggest that you guys make sure you have
11 enough time to respond as well, which could -- you
12 never know how much time you'll need if you get
13 some significant comments, so --

14 MR. SALLEY: I feel confident in letting
15 them proceed, and we can use that time ourselves
16 to comment.

17 CHAIRMAN SELCH: Is there any comments
18 from anyone in the public right now?

19 MR. WENDLAND: I think obviously from
20 the -- when they have the sanitarians and those
21 kind of people involved in this, there's probably
22 a lot in there that's right; but if we have to
23 make some kind of a comment on it, I'd obviously
24 have to make some time to go through it.

25 CHAIRMAN SELCH: Well, did we want to

1 make a motion to let them proceed and make
2 comments during the comment period, or did we --
3 open to suggestions.

4 MR. SALLEY: I think that can be a
5 motion, and I'll make it.

6 CHAIRMAN SELCH: That motion would be to
7 proceed with the changes you made for DEQ4, and
8 take them to the BER.

9 MR. WENDLAND: I'll second that one.

10 MS. WILLIAMS: I would encourage the
11 longer comment period, too.

12 MS. KINGERY: Certainly.

13 CHAIRMAN SELCH: Okay. I guess we'll do
14 a voice vote on the motion. All in favor.

15 (Response)

16 CHAIRMAN SELCH: Opposed.

17 (No response)

18 CHAIRMAN SELCH: Motion carries.

19 MR. BUKANTIS: We've got Dean on the
20 agenda next.

21 CHAIRMAN SELCH: Thank you very much.

22 MS. KINGERY: I do encourage you to look
23 through it, and comment on the blog, on the public
24 comment period, all of it.

25 MR. KILBREATH: If you read our

1 definition of a bedroom --

2 CHAIRMAN SELCH: I'm just looking at the
3 schedule here. Is Dean here?

4 MR. BUKANTIS: He's upstairs.

5 CHAIRMAN SELCH: Seeing as we are at a
6 little after eleven, maybe we'll see if Dean is
7 available. Does that work? Let's take a short
8 break, and see if Dean is available.

9 (Recess taken)

10 CHAIRMAN SELCH: We'll get started again
11 here. If it's okay with everyone, we're going to
12 modify the briefing item agenda. Dean is the
13 action that was supposed to be up next, but we've
14 got Mike Suplee here to talk about nutrient
15 standard, so we'll go ahead with that. Corey, are
16 you still on the phone?

17 (No response)

18 CHAIRMAN SELCH: Corey?

19 (No response)

20 CHAIRMAN SELCH: We may have lost Corey.

21 MR. FISHER: I'm here.

22 CHAIRMAN SELCH: Anyone else on the
23 phone that called in? I didn't hear anyone, but
24 -- okay. So we'll just move on. Mike Suplee is
25 going to talk about nutrient standards.

1 MR. SUPLEE: I think most of you know
2 me, but I'll just introduce myself anyway. Mike
3 Suplee, I work in the Water Quality Standards
4 Section under Bob, and I've primarily been working
5 on nutrient standards for some years, and we're at
6 a point where I thought it was worthwhile to give
7 you an update on where those water quality
8 standards are, and where they're headed, because
9 there's been some significant changes relative to
10 them in the last six months and then going
11 forward.

12 So I think in an earlier WPCAC meeting,
13 there was a presentation from John North on the
14 basics of Senate Bill 367; is that true? So I
15 won't spend a lot of time on that, but I will kind
16 of go over it briefly, and if you have any
17 questions on anything as I go on, feel free to ask
18 me.

19 So Senate Bill 367, which came out of
20 the last Legislature, basically allows the
21 discharger to receive long term, basically up to
22 twenty years, variances from the base numeric
23 nutrient standards. Those are the stringent water
24 quality standards for nutrients that are designed
25 to control nutrification problems in rivers and

1 streams that we've been working on at a technical
2 level.

3 Basically there are three categories of
4 discharger that could receive these variances if
5 it's found, or if they determine that they are
6 capable of meeting the standards. One would be
7 for a discharger greater than one million gallons
8 per day, that would be both municipal and private;
9 less than one million gallons per day; and then
10 separate from that all together independent of
11 flow would be lagoon treatment systems. Those
12 would be people that have their own -- (inaudible)
13 -- improvements as their wastewater processing
14 system.

15 It should be relatively straight
16 forward, in that if the discharger can't meet the
17 base numeric nutrient standards, they can apply
18 for and receive these. They had variances if they
19 can treat to the levels that are specified for
20 each category, and what those are would be greater
21 than one million gallons per day, they would have
22 to treat their effluent; and Type 2, at least one
23 milligram GP per liter; and ten milligrams total
24 nitrogen per liter.

25 If they are in the less than one MGD

51
category, it's two for total phosphorus, two
milligrams per liter, and 15 milligrams TN per
liter. And if they're in the lagoon treatment
system category, they're essentially in a hold the
line status. They need to maintain current
performance.

So for many of them, that would at least
mean monitoring which perhaps is pretty common,
and they may not have monitoring data for
nutrients at this point in time. So that's
something that they have to add to receive this
variance.

So the idea is it's going to allow time
for the discharger to comply with the standards,
and over this 20 year time period. The ultimate
goal is to meet the base standards at the end of
the variance period, but this can occur conforming
with cost and technology changes which can be
anticipated for years.

There is also a caveat or an element of
the law that basically we the Department, in
conjunction with the nutrient work group that our
advisory council need to revisit the discharge
concentrations I just mentioned to you for each
category at three year intervals starting in 2016

1 to update them, make them more stringent as costs
2 and technology increase.

3 So one way or the other they'll be
4 moving in steps towards the standards over the
5 time period that we laid out.

6 So that's the basics of the Senate Bill
7 367. There's some other stuff in there, but I
8 think that's probably all we need to talk about
9 right now, unless you have any specific questions
10 on that.

11 EPA is largely comfortable with this
12 statute and this law. We worked closely with
13 them, we have worked closely with the elements of
14 the Clean Water Act to make sure that from our
15 perspective and our legal staff's perspective,
16 everything we've done is legal, and falls within
17 the framework of the Clean Water Act, although
18 some of the elements are, I'd say, novel or
19 unusual, or haven't been seen by EPA before, and
20 so they're still mulling over aspects of it.

21 What I heard most recently is they're
22 largely comfortable with the entire approach, with
23 the caveat and sticking points that they're kind
24 of working through, kind of like that. How that
25 will ultimately get resolved, we don't know for

sure, but it looks promising, that they will
accept this.

Of course, as you know, all water quality standards changes that we make or put this process in place, EPA has to sign off on it in order to approve permit for this process.

(Inaudible) So we don't want that to happen.

So that's sort of policy. And so moving along in several directions there. At the technical level, I'll give you a status update on the base numeric nutrient standards themselves.

For large rivers, we are now completing, and should have out for public review -- which can include this group if they wanted to -- in just a few weeks our first numeric nutrient standard derived from a water quality model for a large river. We've been working on this since 2007. It's a large undertaking, and it's been precedent setting in a number of different ways. It's not been done before, but we're very, very happy with the result.

It was a model that we built for the lower Yellowstone River essentially from Forsyth to the state border, and we have developed two different criteria for the lower river from this

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1 model. And it's already gone through internal
2 peer review and it's going to go to external peer
3 review and general review here shortly. So if any
4 of you are interested in seeing that document,
5 just let Bob know, and we'll make sure a copy gets
6 to you, or we'll point you to where it's held.

7 Our plans are -- Well, also
8 concurrently, we are working on a similar approach
9 for the Upper Missouri, and this would be for
10 Canyon Ferry upstream to the Three Forks, using a
11 water quality model. We've been collecting data
12 to build that model over last summer and this
13 summer, and that's should be sufficient for us to
14 build that model going forward. We anticipate
15 we'll have that model built much more quickly than
16 the Yellowstone model because we already went
17 through the learning curve, so maybe a year or two
18 out there.

19 We have planned for next summer the rest
20 of the main reach of the Yellowstone River, so
21 that would essentially be from Forsyth all the way
22 up to the Park, with emphasis being placed more on
23 the industrial zone between Livingston and
24 Billings. There will be a lot of data collection
25 through there.

1 We were going to do it this summer. We
2 cancelled that even before the oil spill simply
3 because the flows were so high, and we try to
4 collect data in these models ideally close to a
5 low flow situation, which is what generally
6 permits write to, and what the model design and
7 simulate. And we collected our data in 2007. It
8 was a very low flow year, and that was excellent,
9 we got really good data, and we were able to set
10 that model nicely.

11 We're hoping next year will be more of a
12 normal flow year, because this year is obviously
13 very much an anomaly, and we would have probably
14 cancelled anyway because we couldn't -- because of
15 spill.

16 So we're on target for next summer to do
17 the remainder of the Yellowstone, the Missouri;
18 and from there forward, we have other elements,
19 other reaches of the Missouri, and other rivers
20 that we will target over the years to build these
21 case-by-case models to derive the standards.

22 For wadeable streams, I put out a report
23 in 2008 through discussions with the nutrient work
24 group and subsequent review of our approach. I'm
25 tweaking some of the approaches that I used to

1 develop those criteria, and I'm going through that
2 process right now as we -- deriving the standards
3 that we will recommend for wadeable streams for
4 the various ecoregions of the state that should
5 probably be out this fall.

6 So the numbers are going to change a
7 little bit, and for some region, they're going
8 come up substantially. It just depends. There is
9 going to be more site specific zones that will
10 have criteria.

11 For lakes, data collection for lakes
12 occurred between 2003 and 2008. We've done some
13 initial analysis, but that has not been our
14 primary focus. Our focus is on flowing waters
15 where most of the discharging states occur, and so
16 we'll be moving forward on lakes in the near
17 future.

18 Also we completed an analysis on the
19 Clark Fork River, for which standards were adopted
20 in 2002, and of course those standards were
21 actually passed before this group in 2001 or 2002.
22 And now that there is over 12 to 13 years worth of
23 monitoring data along that river, and many
24 nutrient reduction efforts have gone into place,
25 we've been able to actually see significant

1 improvements along the river, especially below
2 Missoula.

3 And one of the recommendations we'll
4 probably make along with this package is that one
5 of the standards on that river, which is currently
6 39 micrograms TP per liter, we'll probably
7 recommend that it go to 20. That would be in the
8 river from the Blackfoot downstream. The river is
9 already meeting that standard every summer already
10 for the last two years, largely because of
11 existing efforts, and the water quality is better
12 than that already. And it seems like it needed to
13 be that low in order to see and achieve the
14 results that we wanted.

15 So the algae levels have dropped, but it
16 seems like it's doing best when the criteria is
17 lower than what was originally set, 39 micrograms.
18 That's another recommendation we made.

19 Relative to duration and frequency, the
20 other two elements of the water quality standard,
21 independent and nondeg, we'll be looking at a
22 seasonal 14Q10, so that would be basically a two
23 week period of low flow that occurs once every ten
24 years, that would be the flow and duration that
25 permitting, for example, we use when they derive

1 the water levels, etc., that they would try to
2 permit to.

3 And that's based on the time it takes
4 for algae growth, once we transfer exceeded or go
5 too high, basically reach a nuisance level where
6 they begin to -- (inaudible) -- it takes a little
7 while. So about 14 to 20 days, so this is set up
8 to restrain that period.

9 Nondeg. Currently nondeg -- nutrients
10 are lumped with toxics in our nondeg report, and
11 there might be -- we're kind of internally
12 discussing how we ought to flesh this out.

13 At a minimum, the base numeric nutrient
14 standard for total nitrogen and total phosphorus
15 will be separated out from toxics, and will go
16 nondeg regulation specific to that -- that's our
17 intent -- because they're really not -- at least
18 the concentrations and the nutrient species we're
19 talking about are not a toxic, like ammonia and
20 etc., so they need to have nondeg, both are
21 written for that, so we're working on that as
22 well.

23 So that's kind of the basics of what's
24 moving forward. So we have the Senate Bill in one
25 place that has basically cleared the path in many

1 ways to make at least implementing nutrient
2 standards and how stringent they are a
3 possibility. We're in discussion with EPA on fine
4 points of that legislation, and the part that
5 they're not real comfortable with, moving forward
6 on the technical elements.

7 And so the idea is all that this stuff
8 will converge here in the fall, and will become a
9 rule package -- (inaudible) -- So this is our
10 roughed out timeline, and these timelines have
11 slipped before, but I will give you what our
12 timeline is.

13 September 1st, which is actually right
14 around the corner here, this is a hard number.
15 The nutrient work group has a subcommittee that is
16 going to meet to discuss and hopefully iron out
17 some policy issues pertaining to Senate Bill 367
18 from the stakeholders perspective. EPA will
19 probably also participate in that.

20 I have the agenda on that if anybody is
21 interested, and any of you are also welcome to
22 comment. It's a public meeting. It will be in
23 this room. This room, September 1st, 10:00 to
24 4:00 p.m.

25 And again, that will be to discuss the

1 details of policy issues pertaining to Senate Bill
2 367. I have the agenda. The agenda is also out
3 on the nutrient work group website, which is right
4 next to your guys' out there on the website with
5 -- (inaudible) --

6 Then fall and early winter, our goal is
7 to complete the numeric nutrient criteria
8 recommendations, and that would include the
9 Yellowstone, the lower Yellowstone River, the
10 wadeable streams, the updates to the Clark Fork;
11 and we have also been talking about including the
12 water quality criteria for Flathead Lake that was
13 derived for the TMDL, and also which Jack Stanford
14 and the bio station have been working to
15 characterize that lake for so long, and carry that
16 forward for the water quality standards as well.

17 That would not be work that we would do.
18 There is really no value added. They've studied
19 that place a long time. So basically take their
20 work and just throw it into the rule.

21 We're still going to work on the nondeg
22 language this fall. We've got a meeting in front
23 of you, like I said. And then any rule-based
24 elements pertaining to Senate Bill 367
25 interpretation that may need to occur again, so

1 that might be at the September 1st meeting.

2 And then we'll present that rule package
3 -- so criteria, implementation, language as
4 needed, etc. -- to the nutrient work group, where
5 they will have their chance to mull over it, and
6 then the next step is that we come to you.

7 Probably --

8 Our goal, we hope, is to go to the
9 February 2012, if there is one -- they haven't
10 scheduled it, but we think that's when they're
11 going to do their thing -- Board of Environmental
12 Review meeting for consideration and adoption of
13 the standards and the package. So that means that
14 we would come to you, WPCAC, sometime in late
15 winter. I'm not sure what the schedule will be,
16 but that's what we would approach you with that,
17 that whole package.

18 So I wanted to kind of give you a heads
19 up on where we've been, and where we look like
20 we're headed. So far we look like we're on
21 schedule. I don't see anything so far that looks
22 like it's a show stopper, but that could change.
23 If it doesn't, then you would likely see a rule
24 package pertaining to nutrient standards and
25 implementation thereof late this winter, late this

1 year.

2 So that's basically my update. I would
3 be happy to answer any specific questions you have
4 on any of the stuff that I talked about or other
5 stuff.

6 MS. BUCKLIN-SANCHEZ: I have a couple
7 questions. The first question I have is that you
8 talked about the EPA had some comment on Senate
9 Bill 367. Can you provide some detail on that.

10 MR. SUPLEE: The concentrations that I
11 -- There's a couple things. First of all, part of
12 the rationale for not being able to meet the base
13 numeric nutrient standards today is that it would
14 be very expensive. I think that that's pretty
15 clear. But EPA wanted to see a demonstration of
16 that.

17 And there is actually economic
18 methodologies for carrying out that evaluation.
19 We're right in the middle of basically preparing
20 that for them. We don't think that's going to be
21 a problem. There is a couple little minor
22 sticking points on that, but I think that one will
23 probably be okay, based on the amount of work
24 we've done so far. We've been able to show that,
25 yes, we do want people to meet those standards,

1 but meeting them today right now for everybody
2 would be -- (inaudible) -- So that's going very
3 well.

4 I think the larger sticking point at
5 this point is the concentrations I mentioned to
6 you earlier, the one and the ten, and the two and
7 the fifteen, and the hold the line. Essentially
8 we arrived at those through discussions, through
9 debate, through negotiation with our stakeholders
10 And the senatorial adoption process, all that --
11 (inaudible) -- legislation.

12 They have never quite seen it done this
13 way before, and they're not totally sure how they
14 feel about it. That's the one they're mulling
15 over.

16 MS. BUCKLIN-SANCHEZ: I have a -- excuse
17 me. So what they're saying is, "We've not really
18 seen derivation of limit based on negotiation"?

19 MR. SUPLEE: Yes. Essentially. Now,
20 they're very, very comfortable with the way we've
21 derived based on our nutrient standards. They're
22 very comfortable with that. The science behind
23 that is solid. But this kind of "how to get
24 there" process is new. They're not real -- and I
25 think they're actually very comfortable with some

1 dischargers, and those numbers of some
2 dischargers. They're much less comfortable with
3 certain dischargers that they think need to be
4 tested. That's where they've got their hang-up,
5 and that's where we're trying to feel our way
6 through this.

7 George Matthius is very involved in the
8 discussions. This has gone up to Region 8, all
9 the way to the top of Region 8, and out to
10 headquarters, so it's being discussed in
11 Washington.

12 MS. BUCKLIN-SANCHEZ: The second
13 question I had was: You alluded to increased
14 quality in the Clark Fork by saying that that
15 limit maybe would go from 39 to 20 total
16 phosphorus.

17 MR. SUPLEE: Yes.

18 MS. BUCKLIN-SANCHEZ: So I'm curious
19 what's has caused the change. Has it been source
20 water protection actions or -- yeah.

21 MR. SUPLEE: Yes, there have been a
22 series of actions. There have been -- You know,
23 even before that law was adopted, DNRC's
24 monitoring and nutrient reduction program went
25 into place in the late 1990s. Ten years before

65
1 that, there was a phosphorus ban in the whole
2 watershed that was voluntarily implemented by many
3 cities, so that brought phosphorus down a lot
4 already.

5 Missoula went through a major wastewater
6 treatment upgrade in around 2004, and it was on
7 line by 2005, and you can clearly see it in the
8 data set. If you look at the site that is
9 downstream to Missoula, and all the TP and TN
10 numbers dropped substantially. So that's been a
11 big piece of the puzzle.

12 So there's been basically efforts and
13 work to reduce nutrients over the years, and
14 they're starting to show up and take effect in
15 some parts of the rivers. Other parts of it still
16 have issues, primarily in upstream.

17 MS. BUCKLIN-SANCHEZ: Did the
18 phosphorus, the voluntary phosphorus ban, or
19 voluntary phosphorus -- I don't know how to say it
20 right -- but did that occur concurrently with
21 upgrades to the treatment plan?

22 MR. SUPLEE: No. It occurred many, many
23 years before. That actually went in place in
24 1989, so that went in place almost ten years
25 before the voluntary nutrient reduction agreement

that was signed in 1998. And then they got⁶⁶ their
plant on line with this new, nicer DNR plan,
biological nutrient reduction plan in 2004. It's
been kind of happening over time.

But the data set that we used to assess this spans from -- well, extending -- really, really solid data set from 1980 to -- (inaudible) --

MR. HOEHNE: Mike, during the Legislature when these numbers were set for the bigger sized systems, obviously those numbers weren't picked out of the air. There were engineers that come up with these systems can do this and -- (inaudible) --

MR. SUPLEE: Yes, they were set, I would say, at levels where -- For example, let's just talk about one category, where the limit should be. They are very realistically achievable for people in that category today, in most cases.

Now, maybe EPA or even that proposed numbers that were substantially tighter than that initially, and that would have been a much tougher thing to achieve today cost-wise, etc. So you might view them as a really good starting point. They're going to definitely require some upgrades

1 in quite a few facilities already just to achieve
2 the variance numbers, but they are beyond reason
3 -- (inaudible) -- at this point in time.

4 MR. HOEHNE: So the argument it was on
5 our part is a big factor, and EPA -- (inaudible)
6 --

7 MR. SUPLEE: Primarily with -- The
8 categories, of course. Again, it's a thing where
9 they like to split hairs, and say, "Well, when the
10 WQB covers a lot of people from this little town,
11 Deer Lodge, up to Billings -- Billings maybe or
12 Missoula, or whatever you want to name offhand --"
13 that's kind of been their take. And let's see how
14 this plays out.

15 They actually did at one point during
16 the legislation have another category, but the
17 legislation was fast and dirty, and a lot of stuff
18 was all happening at once, and at some point along
19 that process, that one went away, and came back
20 with these three. So that's all I can say about
21 that. And that's a pretty crazy process --
22 (inaudible) --

23 MS. WILLIAMS: Question. So will the
24 results of that legislation be that -- I think
25 this is what maybe EPA is saying -- is that

1 entities that possibly could have done more will
2 fall back to meeting the variance level, right?
3 Is there any incentive for anyone to do more than
4 the variance, I guess?

5 MR. SUPLEE: I don't know if there is an
6 incentive per se. There could be. I'm going to
7 approach this a couple ways. They're putting in a
8 trading policy, so a person who could do better --
9 although I don't think you can actually trade to
10 the -- can't trade to the variance. That actually
11 doesn't apply.

12 I think the only incentive per se really
13 is the hammer at the end of the day, the 20 years.
14 Now, there are people that are already doing
15 better than that now, and I'll kind of go to Jenny
16 to explain what her view might be on that. If
17 they're doing better than that now, and the
18 standards get adopted, for example, they know
19 those are out there, they'll say they're treating
20 to 5 TN and .5 TP, they're not going to back
21 slide, right, in most cases?

22 MS. CHAMBERS: That's the tricky part,
23 because you could say that's what you're
24 performing at now, is the 5.05. The standard, as
25 far as water quality standards, we're looking at

1 one of the requirements for the water quality
2 standard is the low, low numbers. The option they
3 have is to apply for variance. The general
4 variance would be the ten and one, so I would
5 probably deny the ten and one because they're
6 already doing that, so they might have to go to
7 option No. 2, which is the site specific variance
8 for that municipality or that treatment process,
9 and we'd probably then hold the line at the five
10 and .1, but it would be under a more specific
11 variance for that facility, not a general
12 variance.

13 Otherwise they would have to apply the
14 standard, Mike, they'd have to go all the way down
15 the standard and say, "That's your final limits,"
16 and maybe we would work with that system, and
17 maybe they're supposed to meet that final standard
18 with dilution and mixing zone, and they just need
19 ten years or five years to get that. Well, maybe
20 that could develop that permit condition as a
21 compliance condition in the permit to give them
22 that time to meet that standard, and hold the line
23 where the current performance in order to get
24 that, and then they wouldn't need any variance,
25 and they would just be on track to meet that

1 actual water quality standard.

2 So it's really going to be a
3 case-by-case look, based upon where folks are at
4 in the permitting process and the renewal process
5 on what you look at based on their discharges.

6 MS. WILLIAMS: Then will you be using
7 judgment on whether you grant them 20 years from
8 the outset, or whether you grant them five years
9 and revisit, or how does that 20 years time frame
10 figure?

11 MR. SUPLEE: The statute is pretty clear
12 that the person applies for a variance can be for
13 up to twenty years.

14 MS. WILLIAMS: So it's what they apply
15 for.

16 MR. SUPLEE: Right. Once they initially
17 apply for it and get it, they've got a 20 year
18 window. But at the same time, the numbers that
19 they are operating under, the one and the ten, for
20 example, those could change during that 20 years
21 period, so we're going to be revisiting that in
22 another three years; and if they were to change,
23 then the basis for their old one and ten number
24 has sunsetted, so they've got to meet the new
25 criteria, intermediate numbers, whatever it may

1 be, and by that time they're already moving to the
2 standards.

3 So it's a big time window, but it's not
4 like it's just going to be static and the variance
5 values will change -- (inaudible) --

6 CHAIRMAN SELCH: Mike, the thirteen to
7 20 on the Clark Fork, did you say Deer Lodge would
8 be the end of one million --

9 MR. SUPLEE: I believe -- I don't know.
10 I don't remember what -- I think they just meet --
11 (inaudible) -- do you know, Jenny, where they are?

12 MS. CHAMBERS: It is a design condition,
13 so they're probably discharging below one. I
14 don't know what their design is off the top of my
15 head.

16 CHAIRMAN SELCH: Deer Lodge would be the
17 size that would be right there -- (inaudible) --

18 MR. SUPLEE: Incidentally, the standards
19 for where Deer Lodge is are already 20 by --
20 (inaudible) -- they're upstream of the Blackfoot.
21 Where we want to change them is below the
22 Blackfoot down to the confluence with the Flathead
23 because it's working, and it needs to be that low
24 to work, and they're already there or lower, so
25 that whole lower stretch of river is consistently

1 during the summer below 20. Others around 19 -- 72
2 (inaudible) --

3 And like I say, a large part of that,
4 the Blackfoot provides a lot of dilution, which
5 really helps a lot; and then Missoula's upgrade
6 was a significant step forward for the lower
7 river.

8 MS. CHAMBERS: And Deer Lodge, where
9 they discharge, based on what the nutrient
10 criteria would go into effect, they have a zero
11 waste -- (inaudible) -- so they technically
12 shouldn't discharge any amount of wastewater to
13 the Clark Fork during the summer season, so
14 they're working on plant upgrades to work on
15 treatment process changes for the winter months,
16 and then land application and storage for the
17 summer months. So that's going to help in the
18 future with nutrient -- (inaudible) --

19 MS. WILLIAMS: I have a follow up
20 question to that. Many communities are going on
21 discharge systems. Would that affect the local
22 flow in the river, in rivers?

23 MR. SUPLEE: It could, I suppose. It
24 depends how effluent dominant they are. A number
25 of the smaller communities that we've had

1 discussions with, I also sit down with the
2 engineers when a facility is looking at upgrade,
3 and kind of give them the crystal ball view of
4 what's coming down the road with nutrient
5 standards, and maybe they ought to plan for this
6 now, and quite a number of years.

7 A lot of the smaller communities that
8 are a few hundred people, they're basically
9 thinking about planned -- (inaudible) --

10 MS. BUCKLIN-SANCHEZ: Deer Lodge could
11 be significant in the summer if it's not
12 discharging.

13 MR. SUPLEE: I think that there was a
14 period of time when they didn't discharge during
15 the summer because they were able to send their
16 effluent to -- (inaudible) -- ranch, which
17 apparently that fell apart for some reason. I
18 don't know. But in terms of flow in the Clark
19 Fork, they're not. If they're in a little --
20 (inaudible) -- the stream, that might be a
21 different story.

22 CHAIRMAN SELCH: Any other questions for
23 Mike?

24 MR. SALLEY: You want us to review this
25 rule package sometime in the winter. Will we be

1 able to get that before a meeting so we can be
2 aware of --

3 MR. SUPLEE: Absolutely. Depending on
4 how guys would like to do it. It's kind of a
5 strange situation, in that we have another vet, we
6 have vetted nutrient work group for you, so we've
7 got another hoop to jump through. So I would be
8 comfortable, after the nutrient work group is
9 largely happy with it, even if your meetings
10 aren't going to be for some weeks in advance.
11 After that, I don't know a -- (inaudible) --
12 provide it to you, so you can get like advanced
13 ability to mull over it, because it will be a
14 fairly good sized package, I would imagine.

15 We're going to create a new circular for
16 these standards that will be -- (inaudible) --
17 DEQ12, because unlike DEQ7, which apply at all
18 streams, and they apply all year around, and these
19 are zoned, and they're very different, so we're
20 going to split them out as their own circular. So
21 yes, we can get that to you well in advance of any
22 type of action.

23 MS. WILLIAMS: Are there other states --
24 this will probably be a theme with me -- but are
25 other states that are approaching this with EPA in

1 the same way?

2 MR. SUPLEE: Not quite the same way.
3 The two other states that I know that are most
4 active are Florida and Wisconsin. Florida, what
5 happened was they had been working on nutrient
6 standards from a technical basis for a very long
7 time. They also were coming up with numbers
8 finally concerning a different climate -- You
9 think Florida is to Montana -- but many criteria
10 to -- (inaudible) -- seems to be the control
11 nutrification numbers as well.

12 EPA got sued, I believe because they
13 were not moving quick enough, so they ended up
14 promulgating standards for Florida, even though
15 Florida had been moving on them. At that point,
16 there was a whole series of lawsuits going, and
17 counter lawsuits, and the last I heard was that
18 the State of Florida is now proposing criteria and
19 an implementation process that they think will
20 kind of please all parties.

21 In and amongst that, in the --
22 (inaudible) -- criteria, which of course are low
23 and difficult to meet, they have a pretty large
24 piece -- they want to use variances, although I
25 haven't seen their new variance package. Their

1 old one that I saw some months ago wasn't very
2 detailed like ours. Their new one might be
3 better. I don't know.

4 The other approach, what they kind of
5 hang their hat on, is site specific alternative
6 criteria, the idea being that if you develop a
7 TMDL, and the TMDL says this is what the
8 concentrations need to be, effective use, and then
9 they use that, instead of these criteria that they
10 developed by standards for.

11 The reason I don't think that's going to
12 work very well is because if TMDL guys do a good
13 job, and develop a new criterion, it's going to
14 look very much the same as the standards, so I
15 don't think that's going to solve the issue. I
16 think phasing them in over time will work better.

17 So Florida, supposedly the state has got
18 a process that I think will please all parties,
19 EPA, industry folks, environmental groups, etc.

20 In Wisconsin, they've already adopted
21 phosphorus criteria. Again, they look about like
22 ours. And they have some implementation. It
23 falls more in the hands of permitting. They
24 basically are getting three or four permit cycles
25 to phase them in. So maybe they're going to be

1 looking at ten to fifteen years, and they're not
2 calling them variances, they're calling them
3 compliance schedules. I believe they have a point
4 -- (inaudible) -- so that's similar to ours, got
5 that idea from them.

6 And they put in a pretty big nonpoint
7 source requirement. That was a big step forward
8 for that state, which was that people that are
9 nonpoint source contributors to nutrient problems
10 in water bodies need to put in place at least best
11 management practices that achieve this sort of
12 reductions, etc. So that's something we have not
13 attempted to do, but they did in Wisconsin.

14 So those were the two places where I've
15 seen the most action in this area.

16 MS. WILLIAMS: Then the other states are
17 just adopting real low standards?

18 MR. SUPLEE: No, they're dragging their
19 feet. They're waiting for EPA to push them
20 harder, they're developing them, and they're kind
21 of waiting and seeing. A lot of them are kind of
22 focusing on lakes where you're not going to get so
23 much dischargers, so there is not much going on
24 there.

25 One exception -- the two exceptions

1 regionally, Colorado and Utah have both -- Utah is
2 working on standards, but they haven't attempted
3 anything in terms of this policy yet.

4 Colorado did something kind of odd.
5 They basically said that -- I believe it was the
6 standards -- they have some numbers developed for
7 rivers and streams, but they can't be adopted
8 anywhere below a wastewater facility. So that was
9 kind of a --

10 EPA didn't like that one at all, and
11 that -- they are -- EPA has a lot of problems with
12 a lot of their approaches, which I tend to agree
13 with. I think they pretty much did this Clean
14 Water Act -- (inaudible) --

15 So actually there is probably maybe
16 there is two states. There are other states
17 including ones in our region that are working on
18 that as well.

19 MS. WILLIAMS: Then last. The reason
20 we're not putting standards really is to nonpoint
21 sources, we're relying on the TMDL process to deal
22 with that?

23 MR. SUPLEE: We are. Then there is the
24 whole issue of -- and then it goes to the
25 Legislature. Basically Richard has said in

1 meetings that he wasn't willing to do it last
2 session. But that's the willingness at that level
3 that we do kind of something like that in an
4 agricultural state like Montana.

5 MS. WILLIAMS: Sure.

6 MS. CHAMBERS: It is more stringent than
7 the Clean Water Act as far as the regulatory and
8 the point versus nonpoint sources -- (inaudible)
9 -- so if the Water Quality Act statute could have
10 something in there that would have more stringent,
11 but it's not really in the purview of the
12 Department.

13 MS. WILLIAMS: Yes. Thanks.

14 MR. SUPLEE: So I think what we're
15 seeing nationally is standards are coming on line
16 quite a bit. Different states are trying
17 different tactics. I think what will happen is
18 one of the states that's got an approach that will
19 work relatively well, will probably spread more
20 quickly once that gets figured out, but it's
21 almost experimental at this stage. This is how
22 they're doing it in Florida, this is how we're
23 doing it, it's different in Colorado, and it's
24 different in Wisconsin, and none of them are
25 really exactly all identical.

1 They've even attempted to adopt nitrogen
2 standards in Wisconsin, although if you work in
3 this arena, you do need to control the nitrogen if
4 you're going to control the nutrification problem.
5 That's very clear. So they're not going to solve
6 it alone by this process. They weren't willing to
7 go that on nitrogen at that point. They have some
8 big time nitrogen issues through the corn belt, in
9 the central United States, very, very high levels
10 of nitrates all working their way down to the
11 Gulf.

12 MS. WILLIAMS: It seems like the overall
13 process you've used has been sensitive to the
14 issues that municipalities and others are having,
15 and has been open, and collaborative. So it's
16 nice to see that Montana may be sort of leading
17 the way.

18 MR. SUPLEE: So hopefully if EPA likes
19 this approach, and we'll be in good shape. I
20 think we'll be in a position where we can, you
21 know, work our way towards these standards over
22 time, and hopefully we'll be able to get there at
23 the end of this fairly long time -- (inaudible) --

24 CHAIRMAN SELCH: I think I looked at the
25 schedule, and I think we have a meeting November

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1 4th, and another one in December, so I don't know
2 if you can get it through the work group before
3 that. That would be a good one to maybe brief on,
4 and maybe have action in December.

5 MR. SUPLEE: We've got a nutrient work
6 group in late September, and late October, so I
7 think by late October, we might be starting to
8 talk about a package, so I think that late
9 November or December meeting is when you guys
10 might be able to see the package.

11 MR. BUKANTIS: Just for clarification,
12 the last scheduled meeting is the November
13 meeting.

14 CHAIRMAN SELCH: We don't have one in
15 December.

16 MR. BUKANTIS: No. The Board's last
17 scheduled meeting is December 2nd. So probably
18 typically what we would do is set that November
19 meeting, one of the agenda items, we'll schedule
20 for the first meeting for next year. And then
21 we'll have the Board's schedule by then, and set
22 our schedule for the next year. So I'm thinking
23 Mike's package, the probably earliest it could
24 come to the Council as an action item would be in
25 November, but more than likely January.

1 CHAIRMAN SELCH: And you want to move
2 that on to the BER by February?

3 MR. SUPLEE: That's our target. If they
4 have scheduled the meeting. They haven't
5 scheduled their 2012 schedule yet, but we assume
6 that they'll have one in February.

7 CHAIRMAN SELCH: Any other questions?

8 Hearing none, it looks like we're moving
9 on to lunch. Thanks, Mike. Good update. Okay.
10 See, we're at twelve, a little after twelve.
11 We'll take a 30, 40 minute lunch here, and we'll
12 come back with Dean's TMDL update right after
13 lunch. Maybe plan for 12:45.

14 (Lunch recess taken)

15 CHAIRMAN SELCH: We'll probably get
16 started here. I don't know if Corey is back on
17 the phone, but he'll probably be calling back in.
18 So we'll start with Dean Yashan and his TMDL
19 update. I see we've all got a colored map.

20 MR. YASHAN: I see some of you have a
21 pamphlet. I just want to start off by saying I'm
22 going to read over a lot of the basics of what a
23 TMDL is. I think maybe a lot of you have been
24 through that, or maybe before, but I did want to
25 make you aware of this pamphlet, and there is a

1 website where you can get a simulation of the
2 equipment. And just have a basic -- (inaudible)
3 --

4 Certainly for this group, I'd come back
5 and present -- (inaudible) -- water quality. For
6 today, I'm just going to give a little bit of a
7 status update, but I am going to also talk about
8 some general things about just generally how we
9 manage the program, and TMDL status. There is a
10 handout, so I don't have a presentation, so you
11 might want to go to the page on the hand out. I
12 don't know. Is there a separate hand out?

13 Most of the TMDL development, as I have
14 identified here, falls under main pollutant
15 groups, either sediments, nutrients, metals,
16 temperature, pathogen, and salinity, and probably
17 the big four are sediments, metals, and
18 temperature -- (inaudible) -- so pretty much all
19 working on tend to follow those groups.

20 A few basics about TMDL development.
21 One water body segment can have multiple pollutant
22 impairment, so therefore can require multiple
23 TMDL's. So one water body might have a sediment
24 TMDL, a nitrate TMDL, and a copper TMDL, and so
25 you can have the whole -- (inaudible) -- pollutant

1 groups applied to a water body segment.

2 A TMDL project. We have project areas
3 represented by this map. They tend to overlap
4 exactly what we call TMDL planning areas. More
5 than any project associated with TMDL document
6 could include anywhere from one to more than 100
7 TMDL's. We have examples of those out there.
8 Lake Helena's TMDL had more than 100 TMDL's
9 included within it, where's like -- (inaudible) --
10 creek watershed document had one TMDL within it.

11 So we have a habit of calling these
12 documents just a TMDL, which is poor terminology
13 because they are documents with multiple TMDL's in
14 it. So we fall into poor terminology in our
15 program. Myself, too.

16 The reason I bring up those TMDL
17 pollutant groups is because TMDL development is
18 very unique with each of those pollutant groups.
19 The way we do a temperature TMDL is very, very
20 different than how we do a sediment TMDL, the type
21 of data collected, the type of field work that we
22 go out in the field, all across the board.

23 The standards that are applicable. You
24 had Mike Suplee talking about the nutrient
25 standards, very important aspect of nutrient TMDL

1 development, doesn't relate at all to temperature
2 TMDL development.

3 And of course, one of our major program
4 deficiencies, we try to do all the TMDL's at once
5 in a watershed, try to start them at least all at
6 once.

7 Often what happens, though, is what's
8 really efficient is to make sure that we at least
9 have projects where if we have sediment TMDL's, we
10 try to do all the sediment TMDL's in that
11 watershed no matter what the date of the listing
12 was. If we have ten tributaries in sediment
13 impairment, we try to do all ten at once, and some
14 are in 96, and some -- (inaudible) -- the major
15 efficiency is to do them all at once within that
16 TMDL development. Kind of what we call the
17 listing control concept.

18 What will happen sometimes, though, is
19 like maybe we have some large rivers, or we have
20 trouble with data gathering, data collection, so
21 sometimes the metals TMDL work will get out better
22 than like say the sediment TMDL work, and so
23 instead of sitting on that information, we'll go
24 ahead and produce a document with just all the
25 metal TMDL's in them, and follow up a later date

1 with the sediment TMDL's in that document.

2 And so you'll see in some watersheds, we
3 have multiple documents. The Blackfoot headwaters
4 is an example of that. The first document had
5 metals TMDL's contained within, and the second --
6 (inaudible) --

7 So there is a lot of difference between
8 pollutant groups, and specifically mostly like
9 nutrients and sediment also. To get to a certain
10 size river, the TMDL development starts becoming
11 quite different in that sense. I know Mike talked
12 about that with the nutrient standard development,
13 but the large river work for, say, the Yellowstone
14 River TMDL development is quite different than the
15 -- (inaudible) -- and then you place in the
16 different for sediment.

17 Not so much for metals. And temperature
18 gets more complex, but conceptually it's not that.
19 Trying to kind of give you an idea as how we --
20 (inaudible) -- for project management. We have
21 six TMDL development staff within my group of the
22 -- (inaudible) -- production. Myself, you know
23 who I am. I'm the Section Manager of the
24 Watershed Section DEQ, and I have six staff who
25 are writing TMDL's. There's also two staff at EPA

1 that are writing TMDL's also.

2 So if we tend to have them, of the major
3 pollutant groups, we tend to focus on two or
4 three, each individual staff person. So we assign
5 them pollutant groups within a project area, and
6 every project area tends to have at least two
7 people, two project managers. One person may be
8 doing sediment and temperature, and the other may
9 be doing nutrients and metals TMDL's.

10 Again, the goal is to complete all at
11 once in one document, but sometimes it's in
12 stages. So they have multiple project managers.

13 Also sometimes we have personnel within
14 my staff, Christina Staten, who gets assigned like
15 a coordinator role, where you have a lot of
16 stakeholder outreach, multiple TMDL project
17 managers. It's very helpful to have a coordinator
18 help with things like stakeholder outreach, final
19 document completion, landowner assets, and things
20 like that. But also many watersheds, we also have
21 conservation district or watersheds groups --
22 (inaudible) -- coordination assistance.

23 I guess some of our TMDL projects right
24 now are in combination DEQ/EPA efforts, a lot of
25 that because people that EPA has over there

1 working on TMDL documents worked for me
2 previously, and so when you work for EPA, you just
3 take your workload with you, and it's more
4 efficient that way. The goal was that person
5 would continue working on TMDL's, so we just kept
6 the continuity in the operation.

7 But there's a lot of linkage in some
8 cases. Some of our modelers may be consultants
9 supporting the work, they're talking about
10 administrative support for document production and
11 things like that. So we really do have joint
12 efforts. There's a few areas where it's pretty
13 much solely EPA doing the work with consultants,
14 just a few of those. There's a lot of areas where
15 it's just me doing the work, and very little EPA
16 across the board.

17 We refer back and forth to the map here.
18 I'll look at the map more often. A color version
19 there. But just to give you an idea of kind of
20 the status of TMDL documents that we've completed
21 in the past year, going back to August of 2010,
22 July. We've got documents for the west slope of
23 the Gallatin. We addressed sediment, nutrients,
24 and pathogens in that document. There are eight
25 total TMDL's.

1 We completed a document for the Lower
2 Clark Fork tributary with five sediment TMDL's.
3 For the Red Water, we completed a document with
4 nutrient salinity TMDL's for a total of 20 TMDL's.
5 For Missouri/Cascade/Belt -- oh, boy. Sorry about
6 that. I should have caught that. This says
7 nutrient salinity TMDL. It should say metals
8 salinity TMDL's. It was mainly a metals TMDL
9 document. That's where we combined a couple of
10 things for spatial reasons.

11 So that's an idea where we have a
12 project area that really overlaps to what we call
13 referred to -- (inaudible) --

14 Some of the TMDL documents that are
15 nearing completion, the Bitterroot for sediment
16 and temperature TMDL's is due for EPA approval any
17 day now. The Tobacco is out for public comment,
18 closing Monday, for some sediment TMDL's; and the
19 Landusky TMDL document with about six metals
20 TMDL's should be out for public comment a couple
21 days ago.

22 MR. WENDLAND: So how come you have so
23 many on that? Are you just doing a short section
24 for each one of those for 61 TMDL's?

25 MR. YASHAN: Partly. That was metals a

1 lot of times, because with the mining, you have⁹⁰
2 copper, you have arsenic, you have lead, zinc.

3 MR. WENDLAND: So it has more to do with
4 each individual metal than it is the piece of --
5 the stretch of the stream or river?

6 MR. YASHAN: What happens is you maybe
7 have like six or eight stretches of river, and
8 they each have maybe two to five TMDL's for each
9 reach, so multiplying that out. But a couple of
10 those streams up there, some of them have like
11 seven to eight metal impairments, just a big mix
12 of metals contamination in that area, quite
13 heavily contaminated. It's a small area if you
14 look at the map, you know, the short segments
15 coming from there, but a lot of metals
16 contamination issues there.

17 MR. WENDLAND: (Inaudible)

18 MR. YASHAN: In fact, actually what
19 we're seeing is -- you have some improvements in
20 water quality in that area with all the cleanup
21 going on in there, but there is still a lot of
22 issues.

23 Other areas in the near term, where
24 you'll see documents come out. The Little
25 Blackfoot, where we had seven nutrient and metals

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1 TMDL's. We have a large number there, partly
2 because of the metals, and same point. Sediment,
3 metals TMDL's. It's an example of one where we
4 split the nutrient TMDL work from the sediment,
5 metals, and nutrient TMDL's, and will be coming
6 out. Then just like this, all project area.

7 If you look at the map here, I kind of
8 break things out. We have areas with TMDL
9 documents, watershed plans in green. You'll note
10 that because we pushed some of the work back in
11 time, that that represents the -- we took all of
12 the green areas, it's about 75 or 80 percent of
13 all of the TMDL in those areas are completed. So
14 some of the areas have 100 percent of the ones we
15 know of today that have been addressed, and some
16 where we still have work that has to go back and
17 be accomplished. In fact, some that we're
18 currently working on -- they have a cross hatch in
19 there.

20 The blue is where we have TMDL
21 development, what I call TMDL development
22 underway. Notice there is a focus on western
23 Montana at this point in time. There is work
24 going on in the east. And I did make a mistake.
25 That Fort Peck area trips should also be colored

1 blue because of the work we have going on in
2 there. The reality is that Fort Peck area trips
3 involve one water body, and color in the rest of
4 it.

5 It used to be that when we'd pick up a
6 TMDL document, TMDL program would have a big need
7 for a lot of data gathering, a lot of sampling,
8 especially things like metals and nutrients, to
9 just get a good understanding of what the
10 impairment problem.

11 The way things have really shifted here
12 lately is monitoring assessment group --
13 (inaudible) -- is out ahead of us collecting a lot
14 of data, and so when it comes to us, we have a lot
15 more information on what the status is of the
16 impairment for that water body. And actually EPA
17 also hired some consultants to supplement a lot of
18 the information, a lot of eastern Montana areas
19 there.

20 So we have that kind of orange color
21 that shows where there has been a lot of
22 monitoring going on, different aspects of
23 monitoring some of the water bodies, so it was
24 really something in the future we pick those areas
25 up, those are the areas that need a lot more

1 information in there.

2 My last page there, Page 3, just kind of
3 gives you an idea where we're at and where we've
4 been. As of today, we have 780 EPA approved
5 TMDL's going all the way back to -- and heard
6 someone mention the Clark Fork TMDL, the TMDL's
7 associated with that, going way back to 1996.

8 Kind of give you a run down on the
9 different type of TMDL in a grid. A lot of metal,
10 a lot of sediments TMDL's. It's going to be
11 probably switching to a lot more nutrient TMDL's
12 relative to the overall percentage in the future.

13 We've also addressed greater than 250
14 nonpollutant impairments in the TMDL documents.
15 Most of our habitat alteration impairments, that
16 are all -- (inaudible) -- sediment TMDL, a lot of
17 the same type of problems, a lot of the same
18 solutions associated with these kind of
19 alterations. In some cases, kind of a redundant
20 listing in my mind.

21 And also we ultimately addressed some --
22 discussed some -- (inaudible) -- alteration
23 impediments in TMDL documents, and at times
24 temperature TMDL's.

25 Looking forward. For the 2010 list, if

1 we subtract out the recently approved one, that
2 still leaves 1,597 TMDL's that are part of our
3 workload. Of all those, we have 664 scheduled for
4 completion between now and 2014. That's pretty
5 much what you're seeing in this map. The areas
6 that are blue, a lot of the green areas are going
7 back in, and there may be a hand pulled TMDL's
8 that didn't get written in the past that we're
9 going to kind of finish those up, specifically the
10 west slope area.

11 Of those 664, just to give you an idea
12 of the ever changing aspect of them doing TMDL's,
13 about -- I'm estimating, based on the last year
14 and a half, that about 10 percent of those will be
15 removed, and we won't do a TMDL because we've
16 concluded that it's not impaired. But at the same
17 time, we'll probably find 20 to 30 percent
18 increase in new impairments identified.

19 We've seen a lot of metals. We'll do a
20 suite of sampling, and maybe we identify two or
21 three metals -- (inaudible) -- new metals for that
22 water body. But we also see it for nutrients
23 sometimes, too. We've been looking at total
24 phosphorus. When we get the extra data, we also
25 include -- Total nitrogen is also an impairment,

1 so we do a TMDL for both.

2 I think it's important to point out that
3 there is a lot of stuff going on that's really
4 helping provide a foundation for future TMDL
5 development. You heard Mike Suplee up here
6 talking earlier. That's been huge assistance for
7 the nutrient TMDL development work. It's a lot
8 easier working off the numeric than a standard in
9 TMDL development.

10 I mentioned about the large river work
11 in Yellowstone from numeric nutrient standard
12 development. There's a lot of projects going on
13 for that, focusing on the Yellowstone and
14 Missouri; a lot of work going on in the
15 Tongue/Powder area, the salinity, EC/SAR
16 standards, some modeling work, some model refining
17 that is going on, a lot of sampling, some of the
18 sampling I talked about that's been going on there
19 for years.

20 We also have our assessment method
21 updates out there that's helping refine probably
22 the -- (inaudible) -- water quality standards for
23 temperature, metals, nutrients, and sediment.

24 I mentioned about the EPA has associated
25 impairment updates. That was one of the areas I

1 talked about there. Currently the areas that are
2 blue, and wrapping back around, really filling in
3 a lot of data, really going into, instead of
4 having maybe one or two data points to work with
5 to understand the problem. In many cases we're
6 having five to fifteen -- (inaudible) -- water
7 quality, and sources, too.

8 So questions? Any questions?

9 MR. WENDLAND: I know originally they
10 were going to have all the TMDL's done in the
11 state by such and such a date. Obviously that's
12 not doing to happen, because we were going to get
13 them all done, and then started revisiting in five
14 years so -- (inaudible) --

15 MR. YASHAN: Yes. What kind of happened
16 is our workload doubled based on, partly on the
17 reassessment of work between 2000 and 2006. There
18 was a 1996 list, and we went out and reassessed a
19 whole bunch of streams, and in the assessment
20 process, we found like 900 new problems, and those
21 all got thrown on the list; and we started looking
22 at the whole workload that we had to do; and not
23 only are we obligated to complete everything from
24 the 1996 list, we're obligated to complete the
25 whole new list, which back then was like 4,000

1 which was just 900 off the old list.

2 And really to do it efficiently and to
3 really spend the money that we have available,
4 resources we have available, it's that list
5 neutral approach that really works the best for
6 watersheds, kind of a rotating watershed basin
7 approach. And a lot of what we're doing in
8 eastern Montana is just building up some of the
9 data bases and information. I think that the
10 river and tributary metals work. So when we get
11 there, it would be a lot better. But yes, it's a
12 different way of doing --

13 MR. WENDLAND: So they really haven't
14 gone away from the idea of getting it done by a
15 certain date, more so than just getting up and
16 doing it.

17 MR. YASHAN: It's more of a list
18 neutral, just a continuous process. As I
19 mentioned there, we have 1,597 still to do, which
20 we're shooting for 664 by 2014, you know,
21 hopefully more than that.

22 MR. WENDLAND: And the other thing, when
23 you talked about the numeric numbers involved. Do
24 you know what I'm talking about here? One of our
25 biggest heartburn things with that is numerics

1 were just unattainable, when we put numbers in
2 there, that were unattainable -- (inaudible) -- by
3 the Milk River. I mean they were something to
4 look at, but -- and do that.

5 MR. YASHAN: I think part of the
6 attainability relative to point sources, that's
7 the whole discussion on the process and how that
8 process was maintained as well. What will happen
9 is the TMDL development -- (inaudible) -- TMDL
10 will meet water quality standards, then we'll
11 incorporate that in this process, and hopefully --
12 (inaudible) --

13 As far as the numbers in stream, as far
14 as taking the point source out, and look at the
15 numbers in stream, those numbers that Mike's
16 showing, we're routinely pulling water bodies off
17 of impairment status because they are meeting
18 those numbers that are out there. At the same
19 time we're adding more on.

20 But those numbers, when we look around,
21 for the most part -- there might be some
22 exceptions -- but what we're seeing is that those
23 are attainable numbers in areas where -- I mean
24 look at what natural occurring conditions are.
25 For the wadeable streams, those are pretty good

1 numbers. Any other questions?

2 MS. BUCKLIN-SANCHEZ: There was a flurry
3 in the Legislature about what wetland discharges
4 -- and this may actually relate more to Jenny and
5 standards as well -- but what's DEQ's approach
6 with places like Bowdoin, that are man-enhanced
7 water bodies, that release discharges that exceed
8 standards, but there is just limited things you
9 can do. What --

10 MR. YASHAN: We got involved with work
11 with the US Fish and Wildlife Service on Bowdoin
12 and come up with a solution, the goal being to
13 really avoid discharge -- (inaudible) -- deep
14 injection. Unless you have kind of like some type
15 of natural flood event that's so large that would
16 overwhelm it all, which we haven't seen one for so
17 many years, and all of a sudden we saw one this
18 year.

19 But in general, that's what they're
20 looking at is the approach that doesn't have a
21 physical plain discharge to either -- (inaudible)
22 --

23 MS. BUCKLIN-SANCHEZ: Is that being
24 developed in a TMDL process, or is that just their
25 match planning process --

1 MR. YASHAN: -- (inaudible) -- TMDL
2 process, although we were involved with TMDL's,
3 that was in the back of our mind and the ultimate
4 solution. We have a few ideas on how that might
5 work. But lately -- (inaudible) -- so eventually
6 we won't have to wrap around and look at TMDL
7 development -- (inaudible) --

8 MR. WENDLAND: So when you talk deep
9 injection, what does that do to the well water?
10 What effect, or is that what you're looking to try
11 to find out?

12 MR. YASHAN: That's not my area of
13 expertise, but my understanding is that that's
14 something they had to work with EPA as far as
15 finding all the legal perspective, because there
16 are groundwater protection requirements that you
17 have to go way down deep to some existing salty
18 aquifer.

19 MR. WENDLAND: (Inaudible) I'm sure they
20 dealt with the same thing with Tongue River with
21 methane -- (inaudible) --

22 MR. YASHAN: I couldn't answer that
23 specifically, but I know that was a big issue, to
24 get down to -- (inaudible) -- regular aquifers.

25 MS. WILLIAMS: You mentioned one aspect

1 of why EPA is doing some TMDL's, just because of
2 the workload transfer. But are there other
3 reasons that they are doing them versus DEQ? Like
4 do they -- are they helping the tribes, whereas
5 DEQ isn't, or what other reason for EPA?

6 MR. YASHAN: -- (inaudible) -- TMDL work
7 with the tribes, but a lot of this goes back to
8 the question where we still have a court order we
9 have to satisfy for TMDL development. That court
10 order is mainly against EPA, so EPA wants to make
11 sure that we satisfy that one way or another.

12 MS. WILLIAMS: Okay.

13 MR. YASHAN: Our requirement, but right
14 now that 664 is a negotiated approach that the --
15 (inaudible) -- satisfying that order. So EPA has
16 a vested interest in accomplishing that. So there
17 is a lot of areas that EPA is involved, so a lot
18 of areas that a person that got hired by EPA is
19 already working, and an area where EPA also took
20 on a major role, partly because of funding --
21 (inaudible) --

22 MS. WILLIAMS: Didn't the Legislature
23 give you some flexibility on the deadlines?

24 MR. YASHAN: The Legislature gave us the
25 flexibility. I think that was probably necessary

1 for the Court to negotiate, so that flexibility
2 was on like the case in the courts.

3 MS. WILLIAMS: And the plaintiffs are
4 satisfied with -- I didn't get an absolute answer
5 that the plaintiffs were satisfied with that
6 legislation.

7 MR. YASHAN: I don't know the answer to
8 that question. I can't speak for them. But you
9 have -- right now as it stands, you have an
10 agreement with the plaintiffs at this stage as far
11 as what this package of work for the next -- 2014
12 should look like.

13 MS. WILLIAMS: Okay.

14 MR. YASHAN: Interesting system.

15 MS. WILLIAMS: I think they were working
16 on it.

17 MR. YASHAN: So there is a lot of things
18 that have to come together at once.

19 I've been doing these updates, I think
20 probably about once a year, something like that,
21 and so anytime that someone wants me to focus on a
22 specific aspect of anything like that.

23 CHAIRMAN SELCH: Thanks, Dean.

24 Well, moving on, it looks like we are
25 right on schedule except for the fact that we've

1 already -- right on Yellowstone oil spill at 1:15.

2 This one Jenny and I are going to tag team.

3 I'm going to give kind of just a general overview
4 of what's been going on, and then Jenny will
5 provide all the intelligent conversations after
6 I'm done.

7 So I want to just kind of give you an
8 overview. I'm sure a lot of you have read a lot
9 of it in the paper.

10 The spill occurred on July 1st, and I
11 guess the grisly report, I think it was a thousand
12 barrels spill estimate, and that's kind of been an
13 issue of debate, but I think that's the number
14 everyone is kind of going with right now.

15 So the spill site was actually right
16 where that pipe was, actually went under the
17 Yellowstone there. And I apologize. I don't have
18 a good mouse to zoom in and out of here. That
19 bridge right by Laurel, in the town of Laurel
20 there, actually the pipeline went right under the
21 river there, and the pipeline that actually broke,
22 it was more on the south side of the channel
23 there.

24 And so what's been going on since the
25 spill happened was obviously a lot of

1 coordination, and an incident command center was
2 set up, and initially going to look for where the
3 oil was, they formed what are called SCAT teams,
4 which was kind of funny for people with Fish,
5 Wildlife, and Parks, because SCAT is basically
6 animal feces that we look at for diet analysis.
7 So when we were told we were going to be on a SCAT
8 team, we were really excited.

9 So initially, when it first happened,
10 though, the spill occurred right at the peak of
11 the -- almost the peak of the discharge this year.
12 It was a 150 year event. And within a few days
13 after the spill, it actually went up a little bit
14 more, and then it's kind of been dropping down. I
15 don't have all the CFS numbers, but I know it's
16 gone down almost over six feet in elevation just
17 since the spill occurred.

18 So what that did was it actually,
19 because the oil floated on the surface when the
20 spill occurred, a lot of that oil got kind of
21 thrown into the upland areas, into a lot of these
22 back waters, and submerged a lot of these islands
23 as well, and these back water area -- I mean it
24 was a 150 year event, so a lot of these areas are
25 not even typically flooded on an annual basis

1 unless there is a really significant event.

2 And so what the SCAT teams do -- and
3 I'll show you a little bit more about that on the
4 power point slide -- is just basically go and
5 document the degree of oiling throughout wherever
6 they find it. So the reaches are all broken up.
7 These are SCAT reaches, A-1, A-2, A-3, and they go
8 down. They broke it into three segments --
9 actually four, but they're only going to be
10 basically looking at the three, Section A, Section
11 B, and Section C. And I'll kind of show you those
12 here in a little bit.

13 But I actually got an updated file from
14 the guy that showed all of the areas that had been
15 SCAT'ed, and then I just found this morning that
16 he gave me the wrong file. So this is actually a
17 really old file, but it kind of shows you kind of
18 what information was done.

19 This initial assessment was just done
20 along the shoreline, because the water was too
21 high to actually get on the river for the first
22 week and a half; and then these areas that were
23 inundated were actually walked transects of the
24 entire property, so the islands, for example, were
25 completely walked once the --

1 MS. WILLIAMS: So A-9 is -- (inaudible)
2 --

3 CHAIRMAN SELCH: A-9 would be -- and
4 another thing is they actually took new imagery as
5 well. This is Google Earth imagery, but it
6 doesn't show the high water. So for example,
7 right here in A-9, this entire island was
8 inundated with water, and so A-9 kind of talks
9 about -- they obviously went through this side
10 channel, and do the SCAT assessment on that. But
11 this entire island was also walked, and looked for
12 pooled oil as the water has been going down.

13 So the initial response was kind of an
14 emergency response, "Let's find any available oil
15 that we can get booms out, absorb right away,
16 before it gets back in the river." Once that was
17 done -- No one is really sure when we transitioned
18 from the emergency response to regular SCAT
19 duties, but once that had kind of been done, and
20 the water had dropped down, a lot of these areas
21 had to be rewalked to look for pooled oil after it
22 had been kind of walked through.

23 So the initial break, like I said, it
24 happened here right about this location here, so
25 they started picking up this moderate oiling on

1 the shorelines and on the islands as well, and it
2 kind of hugged that south channel. So if you move
3 down the water into the different sections, you
4 can see where different oil deposited.

5 Again, this is a really old map, and so
6 they've got a lot more detail now. Each one of
7 those little "I's" will actually give more
8 information about the -- it will talk about what
9 was oiled, and then the different acronyms that
10 talk about the degree of oiling. And then also,
11 so for example, that was blue, so it was no
12 observed oil at that specific location.

13 Karen, did you have a question?

14 MS. BUCKLIN-SANCHEZ: Why does oil stick
15 more in certain places -- (inaudible) --

16 CHAIRMAN SELCH: Well, specifically I
17 mean the oil is lighter than water when it was --
18 and so before it gets kind of mixed up, and that's
19 kind of a whole other issue of looking for where
20 that oil is that got mixed up with the fine
21 sediments and whatnot.

22 But it floats on the surface, so you've
23 got that water -- you know, it's a 150 year event.
24 It was just trucking. So that oil would basically
25 settle out, it was lighter, and it would basically

1 deposit on those side channels. I mean there was
2 slack water pools on those side channels where the
3 flow would be less, and then any kind of debris
4 would get caught in behind, and as the water
5 started dropping down, it would slowly kind of get
6 settled into those slower pooled areas, and then
7 it would kind of collect in those debris jams.

8 MS. BUCKLIN-SANCHEZ: So the velocity
9 slows on those curves, and it causes --

10 CHAIRMAN SELCH: Yeah, it would. The
11 main fall way would be the heaviest velocity, and
12 then -- I mean for example, it was all the way up
13 to this road, this road that you can see --

14 MS. CHAMBERS: And it was heavy crude
15 oil, so it was a lot heavier, and didn't have a
16 lot of viscosity to it. It would just flow
17 through the pipes, you know, the tank, like a
18 liquid or water would flow. It's more blob, tar,
19 tar type, type oil, that didn't have any additives
20 in it to ensure that the velocity or the flow
21 would go a little bit better, so there wasn't any
22 natural -- not natural. I wouldn't call it
23 natural -- but organic crude, heavy petroleum oil
24 that's heavier and thicker. It would float on the
25 top, and then possibly go off into locations.

1 CHAIRMAN SELCH: And so the spill, at
2 this point they're pretty much wrapping up the
3 original SCAT assessment of the entire area. And
4 just to give you perspective, so here is the spill
5 site here by Laurel. If you kind of go down,
6 those of you who are familiar with Billings, this
7 section goes from "A" to "B" zone is at the Duck
8 Creek Bridge, and there's a fishing access site
9 which is kind of where they're launching all of
10 the boats to kind of move into that.

11 And then "B" actually goes all the way
12 down to the interstate bridge over the river
13 there, and that's this location right up here,
14 going into "C." And then "A" and "B" were
15 obviously the most heavily oiled; and "C" has been
16 a lot more sporadic, the assessment teams down
17 there, a lot more patchy. There will be areas
18 where you will not find anything, and other ones
19 that kind of settled out in some of those areas.

20 This is again -- These graphics are from
21 several -- over a month ago now. And the farthest
22 section that I think they had documented oil, at
23 least on the side channel, was actually down in
24 C-53, which was quite a ways down here yet. I
25 don't have the mileage, river mile estimates off

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1 the top of my head. That would have been at that
2 point. It would have been down here. And that's
3 past Pompey's Pillar, down in there.

4 And the last I heard was that the
5 farthest section that they're going to be actually
6 doing the SCAT assessment is going to be C-88,
7 which that would be the farthest section in "C,"
8 and they're not going to be doing -- they've done
9 some assessments down in "D," and at this point, I
10 was actually walking, I walked C-85 down to C-87
11 on Tuesday, and we didn't find any oil at all at
12 that point.

13 And this isn't to say that there isn't
14 oil further down stream, or that it's not in the
15 sediments or in the water column down there; but
16 as far as any parts that they would actually have
17 any kind of cleanup set into there, it would be
18 small concentrations that would be a natural
19 attenuation treatment anyway.

20 So what happens when these teams go out
21 -- there is a contractor with Exxon, and they have
22 a number of different contractors working for
23 them; there is a federal representative, and then
24 a state representative on all these teams, and the
25 state kind of transitions between DEQ and Fish,

1 Wildlife, and Parks. And so there is someone out
2 there on all those teams.

3 And then at the end of the day, it's
4 called a CTR, which is a combined treatment
5 recommendation. And so the group as a whole will
6 come up with a consensus of -- they'll document
7 everything they found as far as the degree of
8 oiling, and they'll also come up with a treatment
9 recommendation to do with that.

10 And then that can range from -- Jenny
11 can help me out -- anywhere from cutting the
12 vegetation, removing, you know, coming in, putting
13 in booms, absorbing all that oil to that degree,
14 also putting -- there was fixative toxins.
15 Actually don't want it transferable, so if there
16 is oil on the bark of a tree, for example, and
17 it's not transferred, they'll throw sediment from
18 around the area on that, so that animals aren't
19 brushing up against that and getting oiled.

20 And so there is -- those are ATM's,
21 which are approved treatment methodologies. All
22 sorts of different acronyms.

23 MS. BUCKLIN-SANCHEZ: After you get your
24 SCAT, you go to the ATM's?

25 CHAIRMAN SELCH: Yes. So just to kind

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1 of back up. These are -- I just did some fish
2 sampling in some of these sections as well. So
3 look at -- sample fish from a human health
4 perspective. I'm still waiting for some of those
5 results back, but everything we've got at this
6 point has been not nondetect in the fish tissue,
7 and that was kind of expected, because this stuff
8 just doesn't show up in fish tissue as much.

9 So that was kind of a quick oversight on
10 where the spill occurred, and I'll just --

11 MS. BUCKLIN-SANCHEZ: (Inaudible)

12 CHAIRMAN SELCH: We haven't been --
13 That's kind of one of the sampling plan that's
14 getting developed now, is to document the
15 macroinvertebrates and a number of other things as
16 well.

17 So this SCAT criteria, I know the text
18 is extremely small on this, but this kind of gives
19 you an idea of what people are looking for, and
20 what they're documenting on these SCAT teams. Oil
21 whips, for example -- and I'll show you some
22 pictures that all kind of relate to this -- the
23 distribution. These are kind of percentages,
24 trace, sporadic, patchy, broken, continuous,
25 continuous being pretty much obviously a

1 continuous band of seeing the oiling.

2 The thickness, if it's pooled or really
3 thick oil, if it's covering or coating the
4 vegetation. A stain would be if the vegetation,
5 you could see the oil on the vegetation, but it
6 was kind of transparent. You know, you could see
7 it on there, but you could see the green
8 vegetation through it, or just the light film,
9 and then the oil character.

10 A lot of these -- what happens is the
11 longer you go, a lot of the -- (inaudible) -- will
12 burn off, and it will turn into more of a tar,
13 almost like a road tar you would see on the road,
14 as things burn off, and it kind of dries up.

15 MR. WENDLAND: Are you seeing oil film
16 continually going down the river, though, from any
17 of these?

18 CHAIRMAN SELCH: You know, not for the
19 most part. I mean it happened during high water,
20 and a lot of that oil got pushed up on those
21 upland areas, and then by the time we got out
22 there several days after -- I mean people
23 literally couldn't get on the main stem for, I
24 think it was a week and a half after the spill --
25 because it was just trucking -- from the safety

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1 aspect of it. So initially that first week, we
2 were kind of going in those back water channels
3 with john boats, and kind of scouting it from
4 here, and looking for real movable oil.

5 I'll show you some pictures, and
6 basically in those back water areas where you'd
7 see the actual hard oil, or you would see the oil
8 sheen on the surface of the water that was
9 visible. Jenny, did you have anything to --

10 MS. CHAMBERS: Yes. I think it was
11 really surprising when you did SCAT in this area
12 -- I'll show you some of the pictures -- where you
13 can walk for 50 or 70 yards and not see anything,
14 -- (inaudible) -- area or sustained vegetation on
15 some areas from high water. And the waters were
16 four to five times higher CFS value, based upon --
17 (inaudible) --

18 And when you talk with the EPA on scene
19 commander, they basically stated that was a good
20 time of year for it to happen, because it really
21 did dissipate, and really did spread, get up on
22 the higher ground area, so it would be more
23 manageable to be cleaned up, versus if were in a
24 low flow condition, it would have pooled a lot
25 more, and would have been harder to clean up

1 options associated with that.

2 CHAIRMAN SELCH: And it sounds kind of
3 -- It's kind of the way you look at it. It's good
4 that the water was high, and that it kind of
5 captured it; but it's bad in the aspect that now
6 it's all there, and we've got to clean it up, and
7 there is a lot of people affected. These are core
8 back water channels that are critical for
9 spawning, kind of wetland environments; and then a
10 lot of actually agriculture got flooded out, and
11 they'll be making individual claims, and they make
12 their own decisions on their cleanups on the
13 private land and stuff like that.

14 So some of these pictures are hard to
15 get in context without seeing the whole thing, but
16 this is actually a few days after the spill. This
17 is right on Thiel Road (phonetic) there, so if you
18 went over the bridge right by where the spill
19 happened, just up there, the water was right up to
20 the road. And these are just some of the booms
21 that were out there. And the water was extremely
22 turbid, so this isn't actually oil that you're
23 seeing. This is just the turbidity water.

24 But some of the grass is stained there,
25 and a lot of it has already been kind of washed

1 down, or you can see a little bit of the browning
2 on the booms there.

3 But this was the same day. So you can
4 see how the background is all just turbid water,
5 and you can see the actual oil film just kind of
6 persisting in those back water areas. And so you
7 can see the water isn't really moving. The river
8 is going at 150 year event, and in these back
9 waters where it's flooded out, the water is kind
10 of pretty stationary, and not really moving, and
11 so that's why the oil kind of just kind of flows
12 into those areas.

13 MS. WILLIAMS: So is it soluble?
14 Everything that's spilled is going to be sediment,
15 is going to be intact, floating?

16 CHAIRMAN SELCH: No. And initially it's
17 lighter than water, but as it burns off, and the
18 -- (inaudible) -- burn off, then it starts sinking
19 into the sediments, and I'll kind of talk about
20 that a little bit as well. And it also will bind
21 to a lot of those sediment particles, and that's
22 one of the key things we're looking at is, okay,
23 we've got "X" amount of oil that was spilled,
24 we've recovered "X" amount -- which is probably
25 pretty minimal -- where is the rest of it? It's

1 either bound up in sediment, washed downstream, or
2 it's buried in a lot of these sand bars that are
3 -- with all of the erosion and deposition that
4 happened.

5 Here is an example of some willows and
6 young cottonwood. This is in the back water area
7 there pretty close to the spill site. And I've
8 got some better pictures here. But when the water
9 was really high, it actually would tip those
10 cottonwoods over, and then you would see oil on
11 the cottonwood. It would stand back up until it's
12 black. It would just be sitting there like a flag
13 in the water, but yet some of the vegetation --
14 and even cottonwoods ten feet away of the exact
15 same height have no oiling on them, because that
16 glob of oil kind of hit that one tree, and then
17 the other ones didn't even get touched. That's
18 just kind of the same example, a willow.

19 MR. SALLEY: How many gallons of oil, do
20 you know?

21 CHAIRMAN SELCH: It was a 1,000 barrels.

22 MS. CHAMBERS: 50,000 is what they --
23 (inaudible) -- about 42 gallons per barrel
24 roughly, and estimate between 1,000 barrels and
25 1,200 barrels -- (inaudible) --

1 CHAIRMAN SELCH: Here is a picture of
2 where you can see the band of actual oil there
3 where it hit and dropped off, and kind of see how
4 much it's even dropped, and this is just within a
5 -- this was taken like the second week after the
6 spill, and you can see how low the water is
7 dropping even at that point.

8 Here is just another example of the --
9 you can see it got coated, and you can see some of
10 the vegetation even behind it didn't get hit.
11 Here is one where it's flat right on top, and then
12 a lot less there down below.

13 Here is some leafy spurge that got hit,
14 which I wouldn't mind it taking out the spurge,
15 but you can just see how thick it was up in that
16 area. That was up in that Section A. And you
17 know, that would go back quite a ways. That's
18 what you would see from the boat. But obviously
19 this is the initial assessment, that first or
20 second week there, so obviously they'd gone back,
21 and they'd looked behind the shoreline to see if
22 there was poolable oil back in there.

23 That's kind of -- some picture there.
24 Here is what you'd find kind of more on the
25 islands, so once we could get on the islands, and

1 say we're walking on an island, and you see this
2 little band of oil that would be coated on the
3 grass, and so the oil -- the island was flooded
4 out, and then as it receded, this was the level
5 that kind of hit that grass, and stained it. Then
6 the oil went back.

7 And initially there was a technical
8 advisory group that gets together and talks about
9 these approved treatment methods that they can go
10 out to remove these things, and initially there
11 was a lot of discussion about leaving it to
12 natural attenuation in certain instances of where
13 we didn't want to go necessarily remove all of the
14 vegetation off of an island, but the more
15 discussion is that we didn't want that to be
16 available or transferable to critters that are
17 crawling through there as well, and so a lot of
18 this would be actually weed whacked, and the grass
19 has actually grown back quite a bit.

20 I was just on some areas where they weed
21 whacked a lot of these several weeks back, and the
22 grass has grown back up, and it's not as visible,
23 but there is still oil in the soils and stuff that
24 they couldn't remove.

25 Jenny, do you have any other comments?

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1 MS. CHAMBERS: They're removing the
2 vegetation by cutting it, or tree barks, and then
3 they're taking them off -- (inaudible) -- and
4 disposing of the contaminated vegetation. A solid
5 waste is non-hazardous waste.

6 CHAIRMAN SELCH: They have huge boats
7 out there, these huge barges right now, with twin
8 200 horse jets that are moving all the bagged
9 material around, and they have got -- actually
10 most of these islands actually have tents set up
11 on them, they are setting up with people that are
12 working out there, they've got meals, they've got
13 vehicles to move people around the islands, and
14 move these bags off the islands. So it's quite a
15 production.

16 The island that I went on the other day,
17 they welcomed you to the island, he said, "Welcome
18 to Fantasy Island." They've got like a little
19 town out there.

20 MR. SALLEY: So the soil isn't going to
21 be treated at all.

22 CHAIRMAN SELCH: No.

23 MR. SALLEY: -- (inaudible) --
24 vegetation.

25 CHAIRMAN SELCH: No. I think the

1 state's perspective is we don't want do more
2 damage than good when we do this cleanup, and so
3 that's kind of what the groups have been deciding
4 when they approve these treatment recommendations
5 is we're walking kind of a fine line, and it's
6 like we want -- in a perfect scenario, we would
7 want to get it all out of there, but we don't want
8 to be going in there, and dredging and digging up
9 all this stuff.

10 I mean it is organic. The microbes and
11 bacteria will break this stuff down eventually.
12 But like there will be -- More than likely we're
13 going to obviously be evaluating the long term
14 ecological impacts of that, but --

15 MS. CHAMBERS: But there's a soils and
16 sediment plan that they developed, I think they
17 were going to start working on taking some samples
18 last week, so that would be kind of a long term
19 process that goes forward; and then after the
20 initial cleanup and initial response --
21 (inaudible) -- are going to go through some of
22 that, who is responsible now, based upon what
23 regulation, and kind of where that transition
24 point is.

25 And then it will go to the state, mainly

1 DEQ, for long term planning and impacts that will
2 coordinate with Fish, Wildlife, and Parks and DNRC
3 on what the soil sampling results come back on,
4 any other water quality impacts that we want to
5 evaluate, how we're going to manage and look at
6 the long term restoration and monitoring based on
7 the impacts long term within the state, and that
8 will be mainly handled by the Remediation
9 Division, and it will be transferred from a Clean
10 Water Act emergency response activity under EPA
11 authority under the Oil Pollution Control Act, and
12 Clean Water Act, back to Remediation for long term
13 monitoring, evaluate the natural attenuation
14 process, and see whether or not it meets state
15 standards as we move forward.

16 CHAIRMAN SELCH: You can see that band
17 of oil there just below the trees, just as an
18 example of what you'd see on one of these islands.
19 There is an example of kind of a band that would
20 be on a tree, and something like that. They'd
21 actually have the absorbent pads, and get any of
22 that oil off with a pad if they could, and if they
23 couldn't get any more, and it was nontransferable,
24 they'd try and use local sediment to try and put
25 that on there so nothing is transferrable to the

1 wildlife.

2 MR. HOEHNE: Rub dirt on it.

3 CHAIRMAN SELCH: Throw dirt on it.

4 MS. BUCKLIN-SANCHEZ: Fixative.

5 MS. CHAMBERS: Technical term.

6 CHAIRMAN SELCH: So here is kind of an
7 oil water mixture there. You can see how thick
8 black. That's fairly obvious. And then there's
9 some sheen on the bottom. And that's what
10 ultimately -- I mean the Yellowstone is the
11 longest natural running river in the nation right
12 now, and so there is a lots of -- it actually
13 moves sediment, and it moves debris on, like a lot
14 of these other impounded rivers.

15 And so what happens is you have a lot of
16 obviously cottonwoods moving down, and so what
17 we're finding now is that's where that oil is
18 pooling up. It's sticking in behind these debris
19 jams and logs, and that's where you look and find
20 a lot of these oil deposits.

21 Here is an example of when I was
22 actually on the SCAT. This kind of gets back to
23 Kathleen's question about being on the service.
24 There was actually no oil here, and we actually
25 pushed our paddle to kind of push us off this

1 bank, and that's what kind of came up. So that
2 just shows you that it's not just on the surface.
3 Once it burns off, it gets heavier than the water,
4 and it will sink into the sediment.

5 MS. WILLIAMS: Burns off meaning in
6 sunlight?-

7 CHAIRMAN SELCH: Yes, and the sunlight
8 will burn a lot of the volatile.

9 Now, the pictures from this point
10 forward are ones I took this week. This is the
11 very first depositional island below the spill,
12 and I could show you back on the Google Earth map
13 there. This was a huge debris pile, and they've
14 actually been working on this debris pile for
15 weeks. What they found was -- this was probably
16 ten, fifteen feet tall of cottonwood and root
17 wads, and what they found was a lot of that had
18 absorbed a lot of that oil, and in the heat of the
19 day, it would actually be dripping out, and there
20 would be a huge pool of oil beneath those debris
21 jams.

22 That's kind of one of the biggest things
23 they're dealing with now. They've got hundreds of
24 these debris jams, and here we are in the middle
25 of August, and snow is coming, and who know,

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1 October, November, and stuff, and they've got to
2 work through a lot of these debris jams. It takes
3 a lot of effort to move this stuff out. They'll
4 use chippers. Any of the soiled wood, they'll
5 actually be chipping it up, removing it. And here
6 they just continually put down these absorbent
7 pads and remove those as well to absorb all that
8 oil.

9 There's just another picture of a --
10 this is just on the other side of that same debris
11 jam. You can see a guy working on some small
12 equipment there in the background, and you can
13 just see the size of the logs and debris that they
14 need to work around to get at that oil that's
15 underneath.

16 That's just an example of some more of
17 the oil that's just sitting out there in these
18 pockets.

19 This is more indicative of an island.
20 These little tiny patches that you'll find, and so
21 you'll walk -- any debris or any spot that could
22 have held that oil as the water was receding,
23 you'll just find these little patches of oil that
24 they have to go clean up.

25 And there is some oil right above --

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1 this is one of our biologists' head there. You
2 can see there's the darker stain on that debris
3 jam. So not only is it below, but there is a lot
4 of stained vegetation. And there's guys literally
5 picking through that entire debris jam and
6 removing -- obviously cleaning versus oil, and
7 they're removing all the oil stuff and leaving the
8 clean stuff behind. And that's all being
9 quantified, the amount of debris that's being
10 removed.

11 And of course, we've got eagles all up
12 there keeping an eye on us. But those are some of
13 the pictures I had. Jenny could expand on things.

14 MS. CHAMBERS: You talked a little bit
15 about the SCAT process, and how they went through
16 and provide the recommendations for the cleanup,
17 treatment recommendations, the combined treatment
18 recommendations.

19 Then the operation team will send a
20 cleanup crew in there to do those recommendations,
21 and they'll brief, get those areas reSCAT'ed.

22 So once they go through, and they say,
23 "Yeah, we've cleaned up --" get in accordance with
24 the recommendations, they'll send a reSCAT team in
25 to go through and say, yes, were they met, and was

1 it cleaned up in accordance with those
2 recommendations, and then it will be signed off as
3 a target end points document that, yes, the oil
4 has been found and removed, and then maybe this is
5 another area that we need to add to long range
6 planning document for future review and evaluation
7 as it moves forward.

8 Currently EPA is the primary control
9 over the cleanup and the Clean Water Act. They
10 have an order to Exxon that they would get this
11 cleaned up by September 9th, is the current target
12 date for all of the areas that are moderate to
13 heavy oiled areas. That's the authority under the
14 Clean Water Act that there's a possibility or an
15 actual discharge to State surface waters under the
16 Federal Clean Water Act authority.

17 They may change or modify that date so
18 they know where they're at that first week in
19 September, but predominantly, the emergency
20 cleanup under the Clean Water Act will be done
21 hopefully before the snow flies, and then all of
22 the SCAT'ed areas will be reSCAT'ed, and then
23 taken off the list, and then it will go into the
24 long range planning to move it forward.

25 There's like five or six documents

1 currently on the books as far as the plan that
2 Exxon, and the State, and EPA on soil sediment
3 monitoring, ground water monitoring, public
4 drinking water, intake monitoring, and sediment
5 basis monitoring, land owner monitoring based upon
6 complaints, evaluations. So we've got a ton of
7 data that we're sharing between Exxon, EPA, and
8 DEQ, and those are going to continue as we move
9 forward on evaluation and determining what impacts
10 are going to be long range.

11 So that's kind of in a nutshell. So
12 it's been an interesting process, take a lot of
13 the staff time. I know Fish, Wildlife, and Parks,
14 they have been -- quite a few folks. DEQ is the
15 lead agency, so we've got folks on our SCAT team
16 down there, and then we're also managing the
17 in-state plan, so there is about six of us from
18 the manager side that are rotating down at the
19 incident command, and ensuring that we're keeping
20 all the other state agencies in coordination, or
21 addressing citizen complaints, or items that we
22 need to in order to keep this rolling, and keep
23 Exxon accountable for anything that they need to
24 do to maintain this is in operation for process,
25 so --

1 MR. HOEHNE: Is there a point down the
2 road that Exxon gets out of this, and somebody
3 finds something that they missed a year down the
4 road, are they still going to be accountable for
5 it, or --

6 MS. CHAMBERS: That's our main point
7 right now is to do everything we can now, make
8 sure we get everything in requirements, or
9 planning, or sampling effort, because they've got
10 the manpower down there. They've got the
11 operation team, they've got their logistics,
12 they've got all of their sampling folks ready to
13 get those operations. So with any of the
14 remediation type activity or cleanup efforts that
15 are needed, they will always be the responsible
16 party that would be either under order in the
17 future, because we didn't address something, or --

18 But they've been pretty willing to do it
19 under just, "What do you want us to do? We'll
20 move that forward without being ordered to do,"
21 whatever we would ask them to do, but that's
22 always a tool of the tool box to -- (inaudible) --

23 MS. WILLIAMS: So if this had been
24 refined product, would the threats be worse?

25 MS. CHAMBERS: Yes, I believe so.

1 There's a lot more additives, there's a lot more
2 metals, there's a lot more chemicals in refined
3 oil that would have more sediments and aquatic
4 life impacts definitely associated with those. It
5 wouldn't -- might not flow as easily, or it might
6 have been actually determined -- all this waste
7 product would have been hazardous waste.

8 At that point right now, they're able to
9 manage it as a solid waste, or even composting.
10 They're looking at composting of the chipped
11 material, the vegetation material, which you could
12 work as a composting type practice. So a lot of
13 that would have changed based upon the type of
14 material that it was.

15 As you may be aware, they're looking at
16 the Governor's Office to do that pipeline safety,
17 and DEQ, and all the other State agencies are part
18 of that, so there's going to be a lot of action,
19 and a lot of what can we do in the future to
20 prevent this stuff from happening, and what kind
21 of regulations do we need. But it's kind of all
22 up in the air right now, but we're just trying to
23 get this one contained, work with the reporters,
24 the stakeholder groups, to figure out what our
25 regulations are, based on what parts and what

1 pieces, and are there any gray areas that we need
2 to address.

3 CHAIRMAN SELCH: Any questions from
4 anyone else?

5 MR. HOEHNE: Did you find any dead
6 wildlife or anything like that?

7 CHAIRMAN SELCH: You know, they've had
8 the international bird rescue folks looking for
9 water -- not just birds, and they have found a few
10 things, a lot of oiled birds, and a few oiled
11 other critters, and stuff like that.

12 With regard to aquatics, it was flowing
13 so fast and so turbid, it would have been almost
14 impossible to try and document anything. We did
15 do a lot of investigations, and didn't find a
16 whole lot.

17 But you know, based on the literature,
18 it's going to be the long term impacts that are
19 going to have the biggest effect, because it is
20 less likely, because of the volume of the
21 Yellowstone River, it is less likely you're going
22 to see an acute event on a fish living in the
23 river, but long term, it's settled in all those
24 back water habitats, it's in the -- (inaudible) --
25 environment, which affects -- (inaudible) --

1 macroinvertebrates.

2 And the biggest effect on fish would be
3 on reproduction, when they lay their eggs in there
4 and the larvae, that's where it kind of hits them.
5 So you can have longer term reproductive impacts
6 on fish populations and communities as well, more
7 sensitive species as well that are affected.

8 So we're doing -- there's a project.
9 We're even looking at that right now as well.

10 MS. WILLIAMS: What's the effect on
11 plants, whether it's crops, or riparian corridor,
12 or cottonwood regeneration, or -- Is it just an
13 impediment, or does it actually --

14 CHAIRMAN SELCH: I'm not as familiar
15 with that. I know there has been agriculture
16 documents that have been produced that are for the
17 ag folks, and I know I've seen there's cottonwood
18 seedlings coming up right now in a lot of these
19 islands that we're just going back to right now.

20 MS. WILLIAMS: (Inaudible)

21 CHAIRMAN SELCH: So I think the dilution
22 factor was quite a bit, but at the same time, it's
23 regrowing fairly fast. I think from the regrowth,
24 they might be okay, and this is just speaking off
25 the -- but as far as agriculture, that's kind of a

133
1 bigger concern when you're dealing with a food
2 crop.

3 MS. CHAMBERS: They've had the MSU
4 extension ag folks down there that have
5 consultants that are in that practice to come up
6 with an agricultural plan based upon what those
7 private landowners want to do with their hay crop
8 or their fields in a particular area. Some of
9 them are getting it cut, and they're removing the
10 whole crop, and taking some soil samples to
11 determine what the impacts are later on.

12 I think that claims is actually paying
13 those farmers for the next two seasons of crop
14 that they may have impacts associated with, so
15 they're getting compensated, I guess, for some of
16 their losses. There is a different category based
17 upon what they're growing there. So I know hay
18 has different impacts than if there was some kind
19 of food product that's for human consumption
20 versus an animal.

21 But the private landowners for the most
22 part have been pretty okay with what the direction
23 is that they've got from ag contacts, and the
24 Department of Ag. actually sent down there a
25 couple of patients and did some evaluations. And

1 then from DEQ's viewpoint, we just wanted to make
2 sure there's sampling of the soils, but nothing to
3 be resurfaced, as was pointed out later on in the
4 actual fact of water contamination, but if it
5 meets soil sediment criteria, we're going to sign
6 off as being okay, and from the agricultural end.

7 CHAIRMAN SELCH: From an aquatics
8 perspective, too, a lot of these workers that are
9 coming up all came up from the Gulf Coast,
10 Louisiana and Texas. And so when they all came
11 out here, we have our aquatic nuisance species
12 coordinator. We have a position there to
13 decontaminate the boats so they're hopefully not
14 bringing anything in. So that will be -- but with
15 all of the moving around between the islands, and
16 the vehicles, and the people, there is a potential
17 for moving a lot more of these invasive things
18 around, and so that's one of the things that's
19 going to be evaluated as well.

20 MS. WILLIAMS: Cajun -- (inaudible)
21 Thanks for sharing that.

22 MR. YASHAN: Any other questions from
23 anyone?

24 (Inaudible)

25 CHAIRMAN SELCH: Five minutes

1 preparation. We'll have a quick five minute break
2 here for folks, and then we'll continue on with
3 Art Compton's SAR and EC.

4 (Recess taken)

5 CHAIRMAN SELCH: Is everyone back?
6 Okay. Our next briefing item here is from Art
7 Compton, and he's going to talk about EC and SAR
8 stuff.

9 MR. COMPTON: I think I was assigned 15
10 minutes. I don't think I'll need that long, but
11 I'll be sure happy to entertain any questions.

12 As you will recall, in the recent
13 litigation over Montana's water quality standards
14 for conductivity and SAR, the State prevailed in
15 the State litigation, the Wyoming producers
16 prevailed in the federal litigation, and Judge
17 Brimmer in Cheyenne remanded those standards,
18 those salinity and sodium standards, to EPA for
19 reconsideration.

20 At the same time, we were embarking on
21 our triennial review of water quality standards,
22 which I know you've heard plenty about. As an
23 element of that review, we made a special
24 solicitation for public comment on our EC and SAR
25 standards, and to support that public comment, we

1 compiled and posted about 40 studies and new
2 research efforts on coal bed methane produced
3 water and its effect, and posted them for the
4 public to read and, again, help support public
5 input in a 60 day comment period that closed in
6 June of 2010.

7 Once we had, we reviewed all those 40
8 studies and assimilated public comment, we updated
9 our 2002 technical basis for that rulemaking which
10 the original rulemaking was in 2003, and came up
11 with what we called a review of the rationale for
12 EC and SAR standards.

13 It is essentially an updated version of
14 that 2002 technical basis. It's quite a bit
15 broader and deeper than the original technical
16 basis. I think the first technical basis was 17
17 pages, with maybe a dozen literature cites. This
18 one is about 45 pages with about 50 literature
19 sites.

20 What we attempted to do was bring in all
21 the applicable pieces of new literature that had
22 been published, studies that had been performed
23 since the original rulemaking, and again then
24 incorporated into our responses to applicable
25 public comment.

1 So I'm going to pass this copy around.
2 On it, on the cover, just now I wrote the web
3 address for the downloadable PDF file, hoping that
4 most of you, an electronic version would be all
5 you need. Somebody can keep this, this hard copy.

6 UNKNOWN SPEAKER: I think we all have a
7 hard copy.

8 MR. COMPTON: You guys' usual way. Just
9 for your information, the way you retrieve the
10 downloadable one, this is the DEQ basic home page;
11 this is deq@mt.gov; the left lower hand corner,
12 "Water Quality Info;" and then you can see the
13 second item under "What's New" is this document,
14 the final rationale. And I guess you guys have
15 already got it.

16 So that's pretty much it. We do not
17 have a time frame. Oh, and along with this
18 document, we formally submitted that to Region 8
19 EPA on July 18th. In telling us what they'd like
20 us to submit, they also specified the Board
21 transcript from the May 13th Board meeting, in
22 which the Board deliberated this document, and
23 gave the Department some direction on where to go
24 from here, and the Board --

25 We had recommended to the Board that the

1 standards, the numeric standards themselves, the
2 nondeg approach, the numeric nondeg approach, the
3 way the standards were developed, and the
4 implementation measures we were using to
5 administer them. The Board found that those were
6 appropriate, with this new look at the science,
7 and determined that no additional rulemaking was
8 necessary.

9 So that's what we told EPA. We're
10 asking you to reapprove, if you will, our 2003
11 numeric standards and our 2006 numeric nondeg
12 rulemaking, ask you to reapprove those two
13 entities with the support of this new information.

14 We do not have really a projected time
15 frame that we'll hear back from EPA on that, but
16 Bob has received some feedback from Water Quality
17 Standards in Denver that they are going to take an
18 in-depth look at our technical basis, they're
19 going to do probably some additional technical
20 work on their own, and so we do not expect to hear
21 back from them in any immediate time frame.

22 I can't tell you whether it's going to
23 this fall, whether it's going to be the end of the
24 year, whether it might go into next year. We're
25 just not sure.

1 In fact, I'm not sure that Region 8 is
2 sure. I think, as Bob and I discussed it, right
3 now they're kind of getting their arms around
4 this, and those 40 studies that we drew from, and
5 I think they want to familiarize themselves pretty
6 thoroughly with all of that information before
7 they respond in kind of their own technical basis
8 that we suspect will support their approval of
9 those standards, but again, we don't know how long
10 it's going to take.

11 So that's pretty much it. I'll be happy
12 to entertain any questions.

13 MS. WILLIAMS: So EPA lost because the
14 plaintiffs asserted there wasn't a sufficient
15 scientific basis; is that --

16 MR. COMPTON: Kathleen, Mr. Chairman,
17 Kathleen, they basically -- Yes. Essentially what
18 the Judge in Cheyenne said was that EPA didn't
19 show their work. I think in State District Court,
20 we were challenged on our technical basis, and the
21 State District Court and the Montana Supreme Court
22 found in Montana's favor.

23 What the federal litigation was EPA
24 being sued over their approval letter, which is,
25 what, about four pages long, and they really did

1 not go into the technical -- in their first
2 approval letter in 2003, and their second one in
3 2006, they did not go into a great amount of
4 technical detail, and the Federal District Judge
5 in Cheyenne said, "You need to show your work." I
6 think the term he used was "You need to make clear
7 your course of inquiry."

8 And so I think that's one reason we're
9 going to see a pretty extensive effort from Region
10 8 this time on kind of their own technical basis,
11 which will draw from ours, but probably go farther
12 from ours or in addition to that.

13 MS. WILLIAMS: Will that be precedent
14 setting? Now EPA will have to do all their own
15 work when they approve state standards?

16 MR. COMPTON: In other words, will they
17 have --

18 MS. WILLIAMS: Will EPA now have a lot
19 more work to do when they approve state standards?

20 MR. COMPTON: I think that's the way
21 they see it, that they are determined to do -- Bob
22 may have some additional thoughts on this -- but I
23 think they're determined to do a really in-depth
24 technical basis for their approval, which again is
25 where their approval is now lacking.

1 MS. WILLIAMS: Then are the standards
2 enforceable while this is being sorted out?

3 MR. COMPTON: That's correct. They are
4 in full force and effect in state, for our
5 in-state discharges. They do not affect upstream
6 states under the Federal Clean Water Act until
7 they are reapproved by EPA.

8 MS. WILLIAMS: And if they were
9 effective upstream, would that affect Wyoming's
10 land uses and discharges?

11 MR. COMPTON: Are you asking will they
12 affect Wyoming discharges?

13 MS. WILLIAMS: Yes.

14 MR. COMPTON: You know, probably not,
15 and the reason for that is despite the fact that
16 the State rules were remanded to EPA, and
17 therefore are not in effect across the border,
18 Wyoming DEQ has not changed their way of doing
19 business.

20 I think they used two approaches. On
21 the Tongue River, where they have very little
22 development, they write their permits to try and
23 ensure that by their standards none of that water
24 is going to find itself at the main stem of the
25 Tongue.

1 On the Powder River, where the vast
2 majority of Wyoming's CBM production occurs, and
3 where the lion's share of the produced water is
4 discharged, they use what's called assimilative
5 capacity approach.

6 They have looked at our existing water
7 quality standards at the border; calculated month
8 by month how much room they have to discharge
9 before they bump up against those standards;
10 they've taken that assimilative capacity, as we
11 call it, that wiggle room; they've allocated among
12 their producers according to how much land surface
13 each producer has under lease.

14 And so that is how they administer
15 Powder River permits where they calculate that
16 some discharge water will reach the main stem of
17 the Powder, and that is to meet Montana's water
18 quality standard at Morehead, at the border.

19 So that's the two approaches they're
20 using in the Tongue and the Powder. They have not
21 changed that approach because the rules are -- on
22 account of the rules being remanded, I think
23 either because that system gives them a little bit
24 of certainty, or because they suspect that they're
25 going to be reapproved. So again, we have not

143
1 seen any change in Wyoming's permitting math, the
2 issues that drive their permit math, since the
3 remand. They've kept it business as usual.

4 So no, I think if, as we expect, these
5 rules, our standards are reapproved, again, I
6 don't think Wyoming will -- they haven't changed
7 anything as a result of the remand. They won't
8 have to really change anything as a result of the
9 reapproval.

10 CHAIRMAN SELCH: Any other questions for
11 Art?

12 MR. COMPTON: Thanks so much.

13 CHAIRMAN SELCH: Thanks for coming on a
14 Friday.

15 Next on the agenda -- it wouldn't be a
16 WPCAC meeting without hearing from Rod, so I see
17 he's got a big stack of books, and lots of fun
18 stuff to tell us.

19 MR. McNEIL: The past couple of sessions
20 I've talked to you about various aspects of DEQ7,
21 and today I wanted to discuss with you required
22 reporting values, and the revised human health
23 criteria that we're proposing for probably
24 DEQ7-2012. Just calling it 2012 because that's
25 where we are.

1 The RRV's -- This is a direct quote out
2 of DEQ7-2010 as to what constitutes an RRV.
3 Basically the RRV values are the values which the
4 laboratories have to meet in order to be able to
5 report results. In order to derive the RRV's,
6 I'll quote here, "RRV is the Department's best
7 determination of the level of analysis that can be
8 achieved by the majority of commercial,
9 university, and governmental laboratories using
10 EPA approved methods or methods approved by the
11 Department."

12 Now, we've only had a relatively few
13 number of RRV's in DEQ7 to this point. This
14 rework is fairly major, and posting proposing 246
15 new requirement reporting values. Now, to derive
16 those values, protocol is that we contacted a
17 number of major regional and local labs, and got a
18 list from them, and just to give you an idea of
19 what we're dealing with here, here is their
20 response.

21 What this is is a list of all of the
22 procedures that they performed for each of the
23 items in DEQ7, and then their minimum detection
24 levels and their minimum reporting levels for each
25 of those compounds for each procedure. So for

1 instance, for something that's fairly common, like
2 say ammonia, there might be 30 or 40 different
3 procedures that they might use to report this
4 analysis.

5 So we restrict this to methods that are
6 EPA approved under 40CFR136, and the problem is
7 that if we look how the labs make those analyses
8 for what they call their minimum reporting values,
9 it varies from lab to lab. All the labs agreed on
10 MDL's, minimum detection limits, and so that's the
11 basis on which we started to make our analysis and
12 to do recalculations.

13 So we use the MDL values presented by
14 the labs, and we calculate the 75th percentile for
15 all the submitting labs, and then we multiply it
16 by 3.18 to calculate the required reporting value.
17 But the value of 3.18 is a statistical screen to
18 describe a level above the -- (inaudible) ratio.

19 So while they might be able to detect it
20 at some much lower level, we want to have some
21 confidence that the number that they're reporting
22 is reproduceable, and 3.18 number was derived and
23 provided by the EPA in this document that's
24 described to you, Revised Assessment of Detection
25 Implementation Approaches.

1 So that's the procedure that we used for
2 doing the calculation. So now we've got an RRV
3 value, and we had to set up a set of rules on how
4 to use the RRV's. So the first rule is if the
5 calculated RRV is more than 10 percent of the most
6 restrictive standard, the calculated RRV value
7 would be listed.

8 So this would be a case where the
9 procedures are up to the task of measuring to some
10 value less than 10 percent of the standard. The
11 recommendation from EPA is that the procedure
12 should be utilized which allows reporting down to
13 a level of 10 percent of the standard.

14 In many cases, with some compounds that
15 are on our DEQ7 numerics list, no procedure exists
16 to quantify at levels that low. So Rule 4 would
17 cover a situation where the RRV is more than 10
18 percent of the restrictive standard, so we would
19 use the RRV value. If the calculated RRV value is
20 below 10 percent of the most restrictive existing
21 standard, a value equal to 10 percent of the most
22 restrictive standard would be listed.

23 So this meets the criteria for the EPA,
24 and satisfies our requirement for being assured
25 that the standard or method being used is

1 sufficiently sensitive to quantify the levels that
2 we're interested in.

3 We have a couple of other cases, one of
4 which was No. 6 here, "All labs report values
5 above the standard for all EPA listed methods
6 appropriate for that compound," and dioxin is an
7 example of this. "The individual minimum
8 detection level which would derive the RRV closest
9 to the standard will be used to list the RRV."

10 Now, the carcinogenic standard for
11 dioxin is three times ten to the minus six
12 micrograms per liter, a level so low that there is
13 no analytical procedure that's capable of
14 quantifying at that level. This is an
15 extrapolation to estimate the carcinogenicity
16 limits for the compound, and that's how the
17 standard was initially derived. So all we can do
18 is pick the most sensitive technique commercially
19 available, and use the minimum detection level
20 that that lab used of reporting for that analysis.

21 The final case that we have to cover is
22 if no labs in the survey reported MDL's for a
23 given compound, the existing RRV value remains or
24 is replaced with a value equal to 10 percent of
25 the most protective standard listed for a

1 compound.

2 Here is an example of arsenic.
3 Arsenic's level is ten micrograms per liter. You
4 see the values that were reported by five labs.
5 We had six labs that submitted to the study. In
6 this case, only five quantified arsenic. These
7 are their minimum detection limits. Based on
8 that, our derived RRV was .0064.

9 Well, 10 percent of ten micrograms per
10 liter would be one microgram per liter, so the
11 sensitivity availability of techniques is far more
12 sensitive than the requirement for reporting on
13 arsenic. So in this case, we set the standard at
14 one microgram per liter. This is higher than the
15 derived RRV. Rule 5 applies, so the RRV was set a
16 one microgram.

17 For benzine, the standard is five
18 micrograms per liter. You can see the values
19 derived here. And the RRV value derived from the
20 calculation is 1.6 micrograms. Since 10 percent
21 of the standard is .5 micrograms, and this is
22 lower than the derived RRV, Rule 4 again applies,
23 and the RRV is set at 1.6 micrograms per liter,
24 the value that all labs met.

25 We do have situations where the values

1 are sufficiently low enough that some labs are
2 limited. In other words, in this case carbon
3 tetrachloride, the standard is 2.3 micrograms per
4 liter. We had five labs reporting calculations
5 for minimum detection limits. The derived RRV
6 value from that set is .32 micrograms per liter.
7 Since 10 percent of the lowest standard would be
8 .23 micrograms per liter, and this is lower than
9 the derived RRV, Rule 4 applies, and then the RRV
10 is set at .32 micrograms, a value that four of the
11 five labs that reported would meet.

12 So we're basically setting the bar here
13 with RRV's to show the labs what levels they have
14 to use to achieve sensitivities low enough that
15 we're comfortable and confident in their results.
16 And secondarily, if the lab can't meet that
17 standard, it sets a goal for them in terms of
18 looking at new and different procedures, or to add
19 their repertoire, or improving their internal
20 laboratory quality control such that they can meet
21 the criteria for the RRV.

22 The list that you have in front of you
23 lists all the labs that reported their individual
24 MDL's, as well as the calculated RRV values. I'm
25 hoping to come back to you in November with this

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1 as an action item as a portion of the DEQ7-2012
2 update. So I wanted you to have that opportunity
3 to review this, and sort of wrap your head around
4 RRV values.

5 The second section of this that I want
6 -- First of all, are there any questions on RRV's,
7 how we calculate them, why we have them, any
8 aspect?

9 MS. BUCKLIN-SANCHEZ: I have a question.
10 So you're basing the RRV on the minimum detection
11 levels based on that, but some of them are using
12 different techniques than others.

13 MR. McNEIL: These are all based on the
14 same technique.

15 MS. BUCKLIN-SANCHEZ: I understand.
16 Okay.

17 MR. McNEIL: So we select -- I guess
18 I'll call it a standard technique which is EPA
19 approved, and then look at that technique for all
20 of the labs.

21 MS. BUCKLIN-SANCHEZ: And there are
22 multiple techniques for some compounds, but for
23 these, you require one technique.

24 MR. McNEIL: Yes, we used that for
25 calculating RRV.

1 MS. BUCKLIN-SANCHEZ: Thank you.

2 MR. McNEIL: That's sorting wheat from
3 the chaff, so to speak, because there's the other
4 39 procedures that won't meet the criteria in
5 terms of either there isn't an EPA approved
6 procedure, or it isn't sensitive enough for the
7 standard established in DEQ7.

8 Moving on, this year's changes in human
9 health standards comes from a large number of
10 directions, so I wanted to try and give you the
11 opportunity to ask any questions you might have on
12 this.

13 The human health standards are either
14 coming from 304(a) criteria, the MCL's, drinking
15 water standards, or human advisories which are
16 calculated for pesticides not covered as MCL's,
17 304(a) criteria. So we've got three sources of
18 information, and there are seven classes of
19 changes that we had to human health criteria this
20 year.

21 The new MCL standards for aldicarb
22 sulfone, bromate, chlorite, haloacetic acids, and
23 dichloroethylene. Then we have a revised standard
24 for alpha emitters. They actually increased the
25 standard from 1.5 to 15 picocuries, so we're

1 essentially adopting a correction revised
2 standard.

3 We have a new 304(a) criteria that was
4 introduced for hexachlorocyclohexane. This is a
5 complicated compound, in that it has a number of
6 isomers. We've got four isomers, and then we have
7 technical grade hexachlorocyclohexane. And they
8 have -- if you jump down to five, you'll see that
9 we've deleted the 304(a) criteria for
10 delta-hexachlorocyclohexane.

11 The reason we deleted it is that they
12 haven't published any values. They say it's a
13 carcinogen, but they don't have any numerics
14 assigned to it yet. So we're just dropping it
15 from DEQ7. There's no point of listing it if we
16 don't have a number to go with it.

17 The trichlorophenol is a standard that
18 we adopted just last year, but they published a
19 new finding in terms of quantitation for that
20 compound, so we're updating that to reflect a new
21 standard.

22 Then in the human health advisory area
23 for pesticides, the Montana Agricultural and
24 Chemical Groundwater Protection Act detected two
25 new pesticides in groundwater supplies this last

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1 year, Fluroxypyr and Pyrosulam, and so we had to
2 develop standards for those to meet the legal
3 requirements here in the state, and we developed
4 those standards in conjunction with the EPA.

5 We don't do that in a vacuum. So we do
6 the initial calculations for case studies, etc.,
7 and submit those to the EPA, and then say we agree
8 or we disagree because. And fortunately for us
9 this year they agreed with our findings, so they
10 had no objections to any of our calculations.

11 Then the seventh category is revised
12 human health advisories. These compounds were
13 adopted quite some time ago, at least 12 years
14 ago, and the source of information used for
15 deriving the standards is now out of date, and
16 there is considerable new scientific information
17 available for all these compounds, so we conducted
18 a review; and of the eleven, ten have changed
19 substantially in terms of the source information.
20 And the calculations that we've done are now EPA
21 approved as health advisories.

22 So if you looked at an old copy of the
23 DEQ7, you'd see these listed as ag class, or the
24 source of information as "I," which was internet
25 information prior to 1998, which was pretty

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1 non-specific. So to increase the rigor, I guess,
2 scientific rigor for these, we've now -- I guess
3 I'll say -- raised the bar, and reissued these,
4 and proposed to reissue these as a health
5 advisory, two health advisories that are approved
6 by the EPA. And so they approved, and we've
7 received a letter verifying our calculations.

8 So those all appear in your copies of
9 DEQ7. So a little more complicated than usual.
10 Typically we are just adopting one standard for
11 one location or another, but this year we've got
12 seven different classes of changes to human health
13 criteria, with a total of 20 compounds that are
14 being altered or added, so you need some time to
15 wrap your head around that.

16 MR. HOEHNE: When you say you're
17 changing the standard, you're just changing what
18 classification they're being listed at?

19 MR. McNEIL: No, the numeric is actually
20 changed.

21 MR. HOEHNE: What's changed in the
22 numeric standard? Are they all restricted or --

23 MR. McNEIL: For the pesticides, yes.
24 The ten that changed all became more restrictive.

25 MR. HOEHNE: The ones that kind of stick

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1 out to me is the haloacetic acids. (Inaudible)

2 MR. McNEIL: Okay. Haloacetic acids
3 were proposed for drinking water supplies because
4 the haloacetic acids are a byproduct of
5 chlorination, and it was EPA's recommendation we
6 consider adopting these. There are MCL standards
7 that exist for these, so it is a question of
8 adopting the standard.

9 MR. HOEHNE: So the numeric, the number
10 that we're using right now is just -- (inaudible)
11 --

12 MR. McNEIL: We don't have a number.
13 These are new standards. So we don't have a
14 standard for haloacetic acids at this point --
15 (inaudible) --

16 MR. HOEHNE: (Inaudible)

17 MR. McNEIL: They're not quantifying it
18 unless it's been required under a permit issued.
19 In Jenny's shop, they might have a requirement to
20 do analysis to meet federal standards. There is
21 no state standard.

22 MR. HOEHNE: (Inaudible)

23 MR. McNEIL: Okay.

24 MR. HOEHNE: So what is going to --
25 (inaudible) --

1 MR. McNEIL: It's not going to do
2 anything because the standard is the same.

3 MR. HOEHNE: It's the same. Okay.
4 Thank you.

5 MR. McNEIL: Just to get it on the
6 books.

7 MS. BUCKLIN-SANCHEZ: Why did the
8 alpha-emitter standard increase to allow more?

9 MR. McNEIL: It doesn't happen very
10 often, but if you review, the scientific
11 information simply showed that the cause for
12 concern at the lower levels that they had
13 previously was unjustified. Since the original
14 standard was developed, there is probably almost
15 25 years more scientific data and health studies
16 that have been conducted. So it was just a
17 question of the amount of scientific information
18 that's available.

19 MS. BUCKLIN-SANCHEZ: Okay. Human
20 health hazards?

21 MR. McNEIL: Yes, to assess the human
22 health hazards.

23 MS. WILLIAMS: Actually this is a
24 facetious, but I was curious whether
25 hexachlorohexahydroendoexodiamentanaphthalene

1 (phonetic) is the longest element on the list.

2 MR. McNEIL: Maybe.

3 MS. WILLIAMS: Sorry. I couldn't
4 resist.

5 MR. McNEIL: You get an award for
6 reading it.

7 MS. WILLIAMS: These are all manmade
8 compounds?

9 MR. McNEIL: No. DEQ7 includes things
10 such as the natural elements, like selenium, or
11 arsenic, or cadmium, or chlorine, etc. But the
12 vast majority of these are chemical compounds that
13 are in -- (inaudible) --

14 MS. WILLIAMS: (Inaudible)

15 MR. McNEIL: To make things really
16 difficult, if you go look that up, the EPA calls
17 it something else.

18 MS. WILLIAMS: Oh, great.

19 MR. McNEIL: So what we have to do --
20 that's where the CASRN numbers come in, because
21 with a CASRN number, it's just one number.
22 Regardless of whatever you want to call it, that
23 CASRN number refers to the same information base.
24 So it's critical to have that
25 information because many conventions in science

1 have changed over time, and if you say DDT, and
2 were born after -- or you went to college after
3 1980, you don't know what that is. It's in there
4 competing for the longest name.

5 Paraparadichlordiethylchloramine (phonetic) is the
6 name for DDT. But yes. So we have to keep those
7 -- (inaudible) --

8 MS. WILLIAMS: -- (inaudible) -- say
9 them all.

10 MR. McNEIL: Thank you.

11 CHAIRMAN SELCH: As usual, Rod, it
12 doesn't look like you have anything -- (inaudible
13 -- right now.

14 MR. McNEIL: Fantastic.

15 CHAIRMAN SELCH: Well, I don't see
16 anyone in the gallery, so I'm assuming there is
17 going to be no public comment, so that brings us
18 to our agenda items for our next meeting, and I
19 think -- is that November 4th, Bob? Is that the
20 right date?

21 MR. BUKANTIS: November 3rd, Thursday.

22 CHAIRMAN SELCH: It looks like we've got
23 a bunch of potential ones. Do you have anything
24 for sure?

25 MR. BUKANTIS: Yes. If for the only --

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1 expecting DEQ7 to come back complete, that's an
2 action item -- (inaudible) -- in December. I
3 think Jenny may have some permitting things as
4 well for the next meeting. We'll also want to
5 pick a chairperson for next year.

6 CHAIRMAN SELCH: Make sure Dude shows up
7 at that one.

8 MR. BUKANTIS: I can't imagine him being
9 nominated.

10 CHAIRMAN SELCH: I'll work on it.

11 MR. BUKANTIS: And then we'll also want
12 pick the dates for next year, and usual suspects
13 for -- (inaudible) -- So we've got some draft
14 changes to subchapter six water quality standards
15 as well. So --

16 CHAIRMAN SELCH: (Inaudible)

17 MR. BUKANTIS: (Inaudible)

18 CHAIRMAN SELCH: Sounds good. Okay. I
19 suppose we'll be working on that over the next
20 year.

21 MS. WILLIAMS: I have a question when
22 you're done.

23 CHAIRMAN SELCH: I'm done.

24 MS. WILLIAMS: Bear with me. Tell me
25 you want to go if this isn't interesting. But I

1 was on a tour up to Williston, North Dakota, it
2 was an oil economy kind of tour, and the water was
3 real high when we were out there, and there were
4 actually oil rigs that were not submerged
5 entirely. And I'm not sure if they were in North
6 Dakota or Montana.

7 But I was curious. Do you know whether
8 DEQ or whomever allows oil rigs in the flood
9 plain?

10 MR. BUKANTIS: I'm not sure. I guess
11 that's the Board of Oil and Gas. I think where we
12 get involved in oil and gas development is when
13 it's discharging -- (inaudible) -- to state
14 waters.

15 MS. WILLIAMS: Okay. They were
16 operating, and apparently they couldn't get in
17 there to offload the oil because of the water. It
18 looked like it would be something we wouldn't want
19 to have happen. Anyway thank you. I just wanted
20 to -- my curiosity.

21 CHAIRMAN SELCH: Well, I guess if we
22 don't have any other comments or anything,
23 otherwise motion to adjourn.

24 MS. WILLIAMS: Salute.

25 MR. SALLEY: Second.

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(The proceedings were concluded) 161

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C E R T I F I C A T E

STATE OF MONTANA

)

: SS.

COUNTY OF LEWIS AND CLARK

)

I, LAURIE CRUTCHER, RPR, Court Reporter,
Notary Public in and for the County of Lewis
and Clark, State of Montana, do hereby certify:

That the foregoing proceedings were
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IN WITNESS WHEREOF, I have hereunto set
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LAURIE CRUTCHER, RPR

Court Reporter - Notary Public

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March 9, 2012.

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